with Thiophosgene - Conversion to Isothiocyanate Groups An aqueous solution of the product prepared in Example 2 is added to an equal volume. \cdot .

The procedure is repeated, substituting the product of Example 3 for the product of Example 2, EXAMPLE 5

Activation of Amino Group of DOTA-N(2-Aminoethyl)Amide with Bromoacetyl Chloride - Conversion to Bromoacetamide Grou'ps

An aqueous solution of the product prepared in Example 2 (20mg/ml) which also contains triethylamine (20mg/ml) is. . .

EXAMPLE 13

Preparation of - PAMAM - Poly DOTA
The G2.0 PAMAM dendrimer prepared in Example 10 (log, 0.01 mol) is combined with 12 equivalents of DOTA carboxycarbonic anhydride (0,13 mol) prepared as in Example 1, by slowly mixing a precooled (00 C) acetonitrile solution (20 ml) of dendrimer to the DOTA mixed anhydride slurry over 10 minutes and gradually allowing the reaction mixture to warm to ambient temperature. The reaction mixture is worked up. . .

EXAMPLE 17

Preparation of DOTA-G3 Dendrimer magnifier An acetonitrile solution of tris-t-butyl-DO3A and ClCH2CONHCH2(C6H4)pNO2 (Example 16) are heated at 65DC for 24 hours, The chelant-linker product is isolated. . .

CLMEN. . . . compound according to any one of claims 1 to 13 wherein said macrocyclic chelants are selected from the residues of 1,4,7,10- tetraazacyclododecanetetraacetic acid (DOTA),

1 7,10-tetraazacyclododecane 4 triacetic acid (DO3A), I-oxa 7,10-triazacyclododecane-triacetic acid (DOXA), 1 7-triazacyclononanetriacetic acid (NOTA), 11408fll-tetraazacyclotetradecanetetraacetic acid (TETA), DOTA-N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide.

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                 ADISCTI Reloaded and Enhanced
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         SEP 21
                 truncation
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                 CAS REGISTRY(SM) no longer includes Concord 3D coordinates
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         SEP 25
                 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
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                 multiple databases
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         NOV 10
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                 CA/CAplus F-Term thesaurus enhanced
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                 with preparation role
                 CAS Registry Number crossover limit increased to 300,000 in
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                 additional databases
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         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
                 to 50,000
                 CA/CAplus patent kind codes will be updated
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                 CAS REGISTRY updated with new ambiguity codes
NEWS 25
         DEC 01
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 26
         DEC 11
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
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as well as in synaptic membranes.
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IT
                           78137-39-0 78151-11-8
               35144-91-3
    25679-24-7
    RL: PRP (Properties)
       (degradation of, by brain synaptosomes)
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L2
           424 S DYMGWMDF/SQSP
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L3
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L4
             5 S DOTA AND L3
L5
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L6
            12 S L6 AND L3
L7
          0 S L7 NOT PY>1997
^{L8}
             1 S L7 NOT PY>1998
L9
          4485 S L2
L10
            49 S L10 AND L6
L11
            20 S L11 NOT PY>1997
L12
            20 S L11 NOT PY>1996
L13
         14458 S METAL CHELAT?
L14
             3 S L14 AND L10
L15
=> s 110 and (DPTA or DOTA)
          347 DPTA
            1 DPTAS
          347 DPTA
                (DPTA OR DPTAS)
         1203 DOTA
            4 L10 AND (DPTA OR DOTA)
L16
=> d ibib 1-4
L16 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
                       2004:702005 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                       141:230668
                       Contrast enhanced x-ray phase imaging
TITLE:
                       Mattiuzzi, Marco; Arfelli, Fulvia; Menk, Ralf-Hendrik;
INVENTOR(S):
                       Rigon, Luigi; Besch, Hans-Juergen
                       Bracco Imaging S.P.A., Italy
PATENT ASSIGNEE(S):
                       PCT Int. Appl., 38 pp.
SOURCE:
                       CODEN: PIXXD2
DOCUMENT TYPE:
                       Patent
                       English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                       APPLICATION NO.
                              DATE
     PATENT NO.
                       KIND
                                         _____
     _____
                             _____
                       ____
                            20040826 WO 2004-EP1213
                                                             20040210
     WO 2004071535
                       A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
        MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
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GQ, GW, ML, MR, NE, SN, TD, TG

20040210 20051109 EP 2004-709594 EP 1592456 A1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK 20060727 JP 2006-501789 20040210 Т2 JP 2006517558 20030213 US 2003-446986P PRIORITY APPLN. INFO .: W 20040210 WO 2004-EP1213

L16 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

2001:43075 CAPLUS ACCESSION NUMBER:

135:118839 DOCUMENT NUMBER:

Use of the rat pancreatic CA20948 cell line for the TITLE:

comparison of radiolabelled peptides for

receptor-targeted scintigraphy and radionuclide

therapy

Bernard, B. F.; Krenning, E.; Breeman, W. A. P.; AUTHOR(S):

Visser, T. J.; Bakker, W. H.; Srinivasan, A.; De Jong,

Departments of Nuclear Medicine, University Hospital CORPORATE SOURCE:

Dijkzigt, Rotterdam, 3015 GD, Neth.

Nuclear Medicine Communications (2000), 21(11), SOURCE:

1079-1085

CODEN: NMCODC; ISSN: 0143-3636 Lippincott Williams & Wilkins

PUBLISHER: Journal DOCUMENT TYPE:

English LANGUAGE:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS 31 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

1998:271563 CAPLUS ACCESSION NUMBER:

129:119669 DOCUMENT NUMBER:

Unsulfated DTPA- and DOTA-CCK analogs as TITLE:

specific high-affinity ligands for CCK-B

receptor-expressing human and rat tissues in vitro and

in vivo

Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.; AUTHOR(S):

Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.

Ε.

Institute of Pathology, Division of Cell Biology and CORPORATE SOURCE:

Experimental Cancer Research, University of Berne,

Switz.

European Journal of Nuclear Medicine (1998), 25(5), SOURCE:

481-490

CODEN: EJNMD9; ISSN: 0340-6997

Springer-Verlag PUBLISHER:

Journal DOCUMENT TYPE:

English LANGUAGE:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:594650 CAPLUS

DOCUMENT NUMBER:

127:259530

TITLE:

Use of labeled CCK-B receptor ligands for the

detection, localization, and treatment of malignant

human tumors

INVENTOR(S):

Reubi, Jean-Claude

Mallinckrodt Medical, Inc., USA; Reubi, Jean-Claude PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE | | | | | | | | |
|--|---|--|----------------------------|--|--|--|--|--|--|--|--|
| | | WO 1997-US3056 | | | | | | | | | |
| WO 9731657 W: CA, JP, US | A3 19971023 | | | | | | | | | | |
| RW. AT. BE. CH. | DE, DK, ES, FI, F | R, GB, GR, IE, IT, LU, t CA 1997-2247430 | MC, NL, PT, SE 19970225 | | | | | | | | |
| EP 885017 | A2 19981223 | EP 1997-908751 B, GR, IT, LI, LU, NL, S | 199/0225 | | | | | | | | |
| IE, FI | т2 20000523 | JP 1997-531108 | 19970225 | | | | | | | | |
| US 2004185510 PRIORITY APPLN. INFO.: | A1 20040923 | US 2003-626229 EP 1996-200498 A WO 1997-US3056 W | 20030724 19960227 | | | | | | | | |
| PRIORITI ALLEM. INCOV | | WO 1997-US3056 W US 1999-125823 B: | 19970225 L 19990119 | | | | | | | | |
| OTHER SOURCE(S): | MARPAT 127:259530 | | | | | | | | | | |
| => s 110 and DTPA | | | | | | | | | | | |
| 9401 DTPA 6 DTPAS | | | • | | | | | | | | |
| 9401 DTPA (DTPA O | R DTPAS) | | | | | | | | | | |
| L17 9 L10 AND D | TPA | | | | | | | | | | |
| => d ibib 1-9 | | | | | | | | | | | |
| L17 ANSWER 1 OF 9 CAPL ACCESSION NUMBER: | US COPYRIGHT 2006 2004:424231 CAPL | ACS on STN US | | | | | | | | | |
| DOCUMENT NUMBER: | 141:271813 | racterization of a sulf | ated and a | | | | | | | | |
| 11100. | non-sulfated cycl | ic CCK8 analogue functi for metal labelling | onalized with | | | | | | | | |
| AUTHOR(S): CORPORATE SOURCE: | De Luca. Stefania | ; Morelli, Giancarlo rsitario per la Ricerca | sui Peptidi | | | | | | | | |
| CONFORMIL SOURCE. | Bioattivi (CIRPe |) and Dipartimento di C | himica | | | | | | | | |
| COURCE | Biologica, Universita di Napoli "Federico II", Naples, 80134, Italy Journal of Peptide Science (2004), 10(5), 265-273 | | | | | | | | | | |
| SOURCE: | CODEN: JPSIEI; ISSN: 1075-2617 John Wiley & Sons Ltd. | | | | | | | | | | |
| PUBLISHER: DOCUMENT TYPE: | Journal English 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | | | | | | | | | |
| LANGUAGE: REFERENCE COUNT: | | | | | | | | | | | |
| | | | THE RE FORMAT | | | | | | | | |
| L17 ANSWER 2 OF 9 CAPL ACCESSION NUMBER: | 2004:254192 CAPI | US ACS ON STN | | | | | | | | | |
| DOCUMENT NUMBER: TITLE: | 142:62411 In Vitro and In V | vivo Characterization of | Indium-111 | | | | | | | | |
| | Receptor Imaging | om Labeled CCK-8 Derivat | | | | | | | | | |
| AUTHOR(S): | Arra, C.: Affuso. | M.; Caraco, C.; Del Ve A.; Accardo, A.; Mansi | , R.; Tesauro, | | | | | | | | |
| | D.; De Luca, S.; Morelli, G.; Salv | Pedone, C.; Visentin, F vatore, M. | R.; Mazzı, U.; | | | | | | | | |
| CORPORATE SOURCE: | Istituto di Biost Italv | rutture e Bioimmagini, | | | | | | | | | |
| SOURCE: | 19(1), 93-98 | / & Radiopharmaceuticals | (2004), | | | | | | | | |
| PUBLISHER: | CODEN: CBRAFJ; IS Mary Ann Liebert, | | | | | | | | | | |
| DOCUMENT TYPE: LANGUAGE: | Journal English | | | | | | | | | | |
| REFERENCE COUNT: | 16 THERE ARE | l6 CITED REFERENCES AVA | LABLE FOR THIS | | | | | | | | |

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RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:133309 CAPLUS 138:197782 DOCUMENT NUMBER: Peptides conjugates, their derivatives with metal TITLE: complexes and use thereof for magnetic resonance imaging (MRI) Aime, Silvio; Gianolio, Eliana; Morelli, Giancarlo; Pedone, Carlo; Tesauro, Diego; Lattuada, Luciano; INVENTOR(S): Visigalli, Massimo; Anelli, Pier Lucio Bracco Imaging S.P.A., Italy PATENT ASSIGNEE(S): PCT Int: Appl., 44 pp. SOURCE: CODEN: PIXXD2 Patent DOCUMENT TYPE: English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DATE DATE APPLICATION NO. KIND PATENT NO. ______ _____ _____ WO 2002-EP8382 20020726 A2 20030220 WO 2003014157 20031113 . WO 2003014157 А3 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2002-328981 20020726 20030224 AU 2002328981 A1 EP 2002-764797 20020726 20040428 A2 EP 1412383 20061115 В1 EP 1412383 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK 20020726 JP 2003-519106 20050421 JP 2005510461 T2 US 2004-485847 20040902 20050113 A1 US 2005008573 A 20010803 IT 2001-MI1708 PRIORITY APPLN. INFO.: W 20020726 WO 2002-EP8382 MARPAT 138:197782 OTHER SOURCE(S): L17 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN 2001:609701 CAPLUS ACCESSION NUMBER: 136:321340 DOCUMENT NUMBER: New radiolabeled CCK-8 analogues [Tc-99m-GH-CCK-8 and TITLE: Tc-99m-DTPA-CCK-8]: preparation and biodistribution studies in rats and rabbits Ertay, T.; Unak, P.; Bekis, R.; Yurt, F.; Biber, F. AUTHOR(S): Z.; Durak, H. Dept. of Nuclear Medicine, Dokuz Eylul University, CORPORATE SOURCE: Medical School, Inciralti, Izmir, Turk. Nuclear Medicine and Biology (2001), 28(6), 667-678 SOURCE: CODEN: NMBIEO; ISSN: 0969-8051 Elsevier Science Inc. PUBLISHER: Journal DOCUMENT TYPE: English LANGUAGE:

L17 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN 1999:402924 CAPLUS ACCESSION NUMBER:

32

DOCUMENT NUMBER: 131:225550

REFERENCE COUNT:

Radiolabeled peptides for targeting TITLE:

cholecystokinin-B/gastrin receptor-expressing tumors

Behr, Thomas M.; Jenner, Niels; Behe, Martin; AUTHOR(S):

Angerstein, Christa; Gratz, Stefan; Raue, Friedhelm;

Becker, Wolfgang

Department of Nuclear Medicine, Georg-August-CORPORATE SOURCE:

University, Gottingen, D-37075, Germany

Journal of Nuclear Medicine (1999), 40(6), 1029-1044 SOURCE:

CODEN: JNMEAQ; ISSN: 0161-5505 Society of Nuclear Medicine, Inc.

PUBLISHER: Journal DOCUMENT TYPE:

English LANGUAGE:

THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS 40 REFERENCE COUNT:

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L17 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

1999:396519 CAPLUS ACCESSION NUMBER:

131:200015 DOCUMENT NUMBER:

Tri-t-butyl-DTPA: a versatile synthon for TITLE:

the preparation of DTPA-containing peptides

by solid phase

Srinivasan, Ananth; Schmidt, Michelle A. AUTHOR(S):

Mallinckrodt Inc., Hazelwood, MO, 63042, USA CORPORATE SOURCE:

Peptides: Frontiers of Peptide Science, Proceedings of SOURCE:

the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 267-268.

Editor(s): Tam, James P.; Kaumaya, Pravin T. P.

Kluwer: Dordrecht, Neth.

CODEN: 67UCAR Conference

DOCUMENT TYPE: English LANGUAGE:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS 6 REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

1998:271563 CAPLUS ACCESSION NUMBER:

129:119669 DOCUMENT NUMBER:

Unsulfated DTPA- and DOTA-CCK analogs as TITLE:

specific high-affinity ligands for CCK-B

receptor-expressing human and rat tissues in vitro and

in vivo

Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.; AUTHOR(S):

Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.

Ε.

Institute of Pathology, Division of Cell Biology and CORPORATE SOURCE:

Experimental Cancer Research, University of Berne,

Switz.

European Journal of Nuclear Medicine (1998), 25(5), SOURCE:

481-490

CODEN: EJNMD9; ISSN: 0340-6997

Springer-Verlag PUBLISHER:

Journal DOCUMENT TYPE: English

LANGUAGE: THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 26

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:594650 CAPLUS

DOCUMENT NUMBER:

127:259530

Use of labeled CCK-B receptor ligands for the TITLE:

detection, localization, and treatment of malignant

human tumors

INVENTOR(S):

Reubi, Jean-Claude

Mallinckrodt Medical, Inc., USA; Reubi, Jean-Claude PATENT ASSIGNEE(S):

PCT Int. Appl., 61 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

AGE: Eng

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE | | |
|---|----------------------------|---|---|--|--|
| WO 9731657 WO 9731657 | A2 19970904 A3 19971023 | WO 1997-US3056 | 19970225 | | |
| CA 2247430 EP 885017 R: AT, BE, CH, | AA 19970904 A2 19981223 | FR, GB, GR, IE, IT, I CA 1997-2247430 EP 1997-908751 GB, GR, IT, LI, LU, N | 19970225 19970225 | | |
| IE, FI JP 2000506141 US 2004185510 PRIORITY APPLN. INFO.: | T2 20000523 A1 20040923 | | 19970225 20030724 A 19960227 W 19970225 B1 19990119 | | |

OTHER SOURCE(S):

MARPAT 127:259530

L17 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:69756 CAPLUS

DOCUMENT NUMBER:

110:69756

TITLE:

Effects of cholecystokinin-octapeptide (CCK-8) on food

intake and gastric emptying in man

AUTHOR(S):

Muurahainen, Norma; Kissileff, Harry R.; Derogatis,

Andrew J.; Xavier Pi Sunyer, F.

CORPORATE SOURCE:

Coll. Physicians Surg., Columbia Univ., New York, NY,

10025, USA

SOURCE:

Physiology & Behavior (1988), 44(4-5), 645-9

CODEN: PHBHA4; ISSN: 0031-9384

DOCUMENT TYPE:

LANGUAGE:

Journal English

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L17 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AB . . . infusions of CCK-8 and saline on sep. nonconsecutive days after they had consumed 500 g of tomato soup tagged with technetium-99-DTPA. Intake of a test meal was measured 20 min after consumption of the soup whereas gastric emptying was simultaneously monitored. . .

IT 25126-32-3

RL: BIOL (Biological study)

(appetite and stomach emptying response to, in man)

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INFLUENCIA DE LA COLECISTOKININA ENDOGENA EN EL VACIAMIENTO GASTRICO Y EN LA SECRECION POSPRANDIAL DE INSULINA EN EL

HOMBRE

AUTHOR:

HIDALGO GRAU, LUIS ANTONIO

CORPORATE SOURCE:

SOURCE:

UNIVERSITAT AUTONOMA DE BARCELONA (SPAIN) (5852) Dissertation Abstracts International, (1993) Vol. 56, No. 1C, p. 157. Order No.: AARC391489 (not available for sale by UMI). SERVEI DE PUBLICACIONS DE LA UNIVERSITAT AUTONOMA

DE BARCELONA, EDIFICI RECTORAT, APARTAT POSTAL 20, E-08193

BELLATERRA (BARCELONA), SPAIN.

ISBN: 84-7929-812-X.

DOCUMENT TYPE:

Dissertation

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=> d kwic 1-2

L20 ANSWER 1 OF 2 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

. . of radioisotopes for physiological studies... Their use for AΒ the labelling of small compounds such as drugs has not been reported. Cholecystokinin (CCK) is a hormone whose actions have been

associated with satiety, and whose levels have been found to be abnormal. ${\rm sp}{111}$ In or ${\rm sp}{99m}$ Tc using polyaminopolycarboxylic acid chelators is reported. The synthesis of disubstituted as opposed to monosubstituted EDTA and DTPA resulted from reaction of a model amine with the dianhydrides of EDTA and DTPA under various reaction conditions.

ANSWER 2 OF 2 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

ENDOGENOUS CHOLECYSTOKININ MODULATES GASTRIC EMPTYING AND ΤI POSTPRANDIAL RELEASE OF INSULIN IN HUMANS INFLUENCIA DE LA COLECISTOKININA ENDOGENA EN EL VACIAMIENTO GASTRICO Y. .

Aim of the study. To determine the effect of endogenous AΒ cholecystokinin (CCK) on gastric emptying and postprandial release of insulin in humans.

Materials and method. Six healthy volunteers underwent three experiments.. . . liquid meal containing 100 g glucose, and an egg yolk mixed with 150 ml of milk. To evaluate gastric emptying, Tc99-DTPA (2 mCu) was added to the meal. To evaluate gallbladder emptying, Tc99-HIDA (5 mCu) was given i.v. one hour before. . .

=> s metal chelat?

34727 METAL

11101 METALS

40243 METAL

(METAL OR METALS)

4454 CHELAT?

497 METAL CHELAT? L21

(METAL (W) CHELAT?)

=> d his

(FILE 'HOME' ENTERED AT 13:35:48 ON 07 DEC 2006)

FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006

136 S DY'NLE'GW'NLE'DF/SQSP · L.1

424 S DYMGWMDF/SQSP L2

FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006

L3 84 S L1

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0 S DPTA AND L3
L4
              5 S DOTA AND L3
L5
         134722 S CHELAT?
L6
             12 S L6 AND L3
L7
              0 S L7 NOT PY>1997
L8
              1 S L7 NOT PY>1998 /
L9
           4485 S L2
L10
             49 S L10 AND L6
L11
             20 S L11 NOT PY>1997
L12
             20 S L11 NOT PY>1996
L13
          14458 S METAL CHELAT?
L14
              3 S L14 AND L10
L15
              4 S L10 AND (DPTA OR DOTA)
L16
              9 S L10 AND DTPA
L17
     FILE 'DISSABS' ENTERED AT 13:46:43 ON 07 DEC 2006
            323 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8))
L18
            360 S DTPA OR DOTA
L19
              2 S L19 AND L18
L20
            497 S METAL CHELAT?
L21
=> s 121 and 118
             0 L21 AND L18
L22
=> file pctfull
                                                   SINCE FILE
                                                                   TOTAL
COST IN U.S. DOLLARS
                                                        ENTRY
                                                                 SESSION
                                                                  136.00
                                                         7.67
FULL ESTIMATED COST
                                                   SINCE FILE
                                                                   TOTAL
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
                                                                 SESSION
                                                        ENTRY
                                                          0.00
                                                                    -3.00
CA SUBSCRIBER PRICE
FILE 'PCTFULL' ENTERED AT 13:50:53 ON 07 DEC 2006
COPYRIGHT (C) 2006 Univentio
                                            <20061205/UP>
                            5 DEC 2006
FILE LAST UPDATED:
                                200648
                                              <200648/EW>
MOST RECENT UPDATE WEEK:
FILE COVERS 1978 TO DATE
>>> IMAGES ARE AVAILABLE ONLINE AND FOR EMAIL-PRINTS <<<
>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN THIS FILE.
    SEE
    http://www.stn-international.de/stndatabases/details/ipc-reform.html >>>
>>> FOR CHANGES IN PCTFULL PLEASE SEE HELP CHANGE
    (last updated April 10, 2006) <<<
=> s cholecystokinin or (CCK-8 or CCK8 or (CCK () 8))
          1899 CHOLECYSTOKININ
           132 CHOLECYSTOKININS
          1949 CHOLECYSTOKININ
                  (CHOLECYSTOKININ OR CHOLECYSTOKININS)
          2003 CCK
            36 CCKS
          2007 CCK
                  (CCK OR CCKS)
       1002744 8
            255 CCK-8
                  (CCK(W)8)
             63 CCK8
           2003 CCK
             36 CCKS
           2007 CCK
```

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(CCK OR CCKS)
       1002744 8
           255 CCK (W) 8
          2006 CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK (W) 8))
L23
=> s DPTA or DOTA
           910 DPTA
             1 DPTAS
           910 DPTA
                 (DPTA OR DPTAS)
          1767 DOTA
             5 DOTAS
          1768 DOTA
                 (DOTA OR DOTAS)
          2224 DPTA OR DOTA
L24
=> s DTPA or DOTA
          5576 DTPA
           12 DTPAS
          5579 DTPA
                 (DTPA OR DTPAS)
          1767 DOTA
             5 DOTAS
          1768 DOTA
                 (DOTA OR DOTAS)
          6121 DTPA OR DOTA
L25
=> s 125 and 123
         110 L25 AND L23
1.26
=> s 126 not py>1996
        935225 PY>1996
            10 L26 NOT PY>1996
1.27
=> d ibib 1-10
                                   COPYRIGHT 2006 Univentio on STN
       ANSWER 1 OF 10
                         PCTFULL
L27
                        2001076631 PCTFULL
ACCESSION NUMBER:
       no bibliographic data available - please use FPI for PI information
DESIGNATED STATES
                                 COPYRIGHT 2006 Univentio on STN
       ANSWER 2 OF 10
                         PCTFULL
L27
                        1996040293 PCTFULL ED 20020514
ACCESSION NUMBER:
                        STRUCTURALLY DETERMINED METALLO-CONSTRUCTS AND
TITLE (ENGLISH):
                        APPLICATIONS
                        METALLO-ASSEMBLAGES DETERMINES STRUCTURALEMENT ET
TITLE (FRENCH):
                        APPLICATIONS
                        SHARMA, Shubh, D.
INVENTOR(S):
                        RHOMED INCORPORATED;
PATENT ASSIGNEE(S):
                        SHARMA, Shubh, D.
                        English
LANGUAGE OF PUBL.:
DOCUMENT TYPE:
                        Patent
PATENT INFORMATION:
                                           KIND
                                                    DATE
                        NUMBER
                        ______
                                             Al 19961219
                        WO 9640293
DESIGNATED STATES
                        AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI
       W:
                        GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD
                        MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM
                        TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ
                        MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC
                        NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
                                             A 19960606
                        WO 1996-US9840
APPLICATION INFO .:
```

US 1995-8/476,652

PRIORITY INFO.:

19950607

COPYRIGHT 2006 Univentio on STN PCTFULL ANSWER 3 OF 10 L27 1996039128 PCTFULL ED 20020514 ACCESSION NUMBER: PROTEIN PARTICLES FOR THERAPEUTIC AND DIAGNOSTIC USE TITLE (ENGLISH): PARTICULES PROTEIQUES A USAGE THERAPEUTIQUE ET TITLE (FRENCH): DIAGNOSTIQUE YEN, Richard, C., K. INVENTOR(S): HEMOSPHERE, INC.; PATENT ASSIGNEE(S): YEN, Richard, C., K. English LANGUAGE OF PUBL.: Patent DOCUMENT TYPE: PATENT INFORMATION: NUMBER KIND DATE _____ WO 9639128 A1 19961212 DESIGNATED STATES AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI W: GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG WO 1996-US9458 A 19960604 APPLICATION INFO .: US 1995-8/471,650 19950606 PRIORITY INFO.: 19951109 US 1995-8/554,919 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 4 OF 10 L27 1995015118 PCTFULL ED 20020514 ACCESSION NUMBER: GAS MICROSPHERES FOR TOPICAL AND SUBCUTANEOUS TITLE (ENGLISH): APPLICATION MICROSPHERES GAZEUSES POUR APPLICATION TOPIQUE ET TITLE (FRENCH): SOUS-CUTANEE UNGER, Evan, C.; INVENTOR(S): MATSUNAGA, Terry; YELLOWHAIR, David UNGER, Evan, C.; PATENT ASSIGNEE(S): MATSUNAGA, Terry; YELLOWHAIR, David LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent PATENT INFORMATION: KIND DATE NUMBER ______ Al 19950608 WO 9515118 DESIGNATED STATES AU CA CN JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL W : PT SE A 19941130 WO 1994-US13817 APPLICATION INFO .: 19931130 US 1993-8/159,674 PRIORITY INFO.: 19931130 US 1993-8/159,687 US 1993-8/160,232 19931130 19940916 US 1994-8/307,305 19941129 US 1994-8/346,426 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 5 OF 10 1995005842 PCTFULL ED 20020514 ACCESSION NUMBER: METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE TITLE (ENGLISH): DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES TITLE (FRENCH): MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES DYSFONCTIONNEMENTS DES MUSCLES LISSES PASRICHA, Pankaj, J.; INVENTOR(S): KALLOO, Anthony, N.

THE JOHNS HOPKINS UNIVERSITY

PATENT ASSIGNEE(S):

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER KIND DATE
-----WO 9505842 A1 19950302

DESIGNATED STATES

W:

CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO.: WO 1994-US9759 A 19940823 PRIORITY INFO.: US 1993-112,088 19930826

L27 ANSWER 6 OF 10 ACCESSION NUMBER:

ANSWER 6 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

1994004674 PCTFULL ED 20020513

TITLE (ENGLISH): HUMAN MELANOCYTE STIMULATING HORMONE RECEPTOR
TITLE (FRENCH): RECEPTEUR D'HORMONE STIMULANT LE MELANOCYTE CHEZ

L'HOMME

INVENTOR(S):

WIKBERG, Jarl; CHHAJLANI, Vijay WIKBERG, Jarl;

PATENT ASSIGNEE(S):

CHHAJLANI, Vijay English Patent

LANGUAGE OF PUBL.:
DOCUMENT TYPE:

PATENT INFORMATION:

NUMBER KIND DATE

WO 9404674 A1 19940303

DESIGNATED STATES

W:

AU BB BG BR BY CA CZ FI HU JP KP KR KZ LK MG MN MW NO NZ PL RO RU SD SK UA US VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE

SN TD TG

APPLICATION INFO.: PRIORITY INFO.:

WO 1993-DK273 A 19930820 DK 1992-1046/92 19920821 DK 1992-1118/92 19920910 DK 1993-528/93 19930505

L27 ANSWER 7 OF 10

ACCESSION NUMBER: TITLE (ENGLISH):

PCTFULL COPYRIGHT 2006 Univentio on STN

1993018797 PCTFULL ED 20020513

METHOD OF INTRAOPERATIVELY DETECTING AND LOCATING

TUMORAL TISSUES

TITLE (FRENCH):

PROCEDE POUR DETECTER ET LOCALISER DE FACON

PEROPERATOIRE DES TISSUS TUMORAUX

INVENTOR(S):

ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

PATENT ASSIGNEE(S):

MALLINCKRODT MEDICAL, INC.;

ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

LANGUAGE OF PUBL.: DOCUMENT TYPE: English Patent

PATENT INFORMATION:

DESIGNATED STATES

W:

AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL

PT SE

APPLICATION INFO.: PRIORITY INFO.:

WO 1993-US2772 A 19930324 NL 1992-92200848.7 19920325

- L27 ANSWER 8 OF 10

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1992004916 PCTFULL ED 20020513

TITLE (ENGLISH): PARTICULATE AGENTS

TITLE (FRENCH): AGENTS SOUS FORME DE PARTICULES

INVENTOR(S): FILLER, Aaron, Gershon

ST. GEORGE'S ENTERPRISES LIMITED; PATENT ASSIGNEE(S): FILLER, Aaron, Gershon LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent PATENT INFORMATION: KIND DATE NUMBER ____ _____ A2 19920402 WO 9204916 DESIGNATED STATES AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL NO SE US W: A 19910913 APPLICATION INFO .: WO 1991-EP1780 GB 1990-9020075.9 19900914 PRIORITY INFO.: 19901030 GB 1990-9023580.5 GB 1990-9027293.1 19901217 GB 1991-9100233.7 19910107 GB 1991-9100981.1 19910116 19910131 GB 1991-9102146.9 19910520 GB 1991-9110876.1 19910730 GB 1991-9116373.3 19910819 GB 1991-9117851.7 GB 1991-9118676.7 199.10.83.0 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 9 OF 10 L27 1992001469 PCTFULL ED 20020513 ACCESSION NUMBER: A COMPOSITION PROVIDING IMPROVED CLEARANCE OF BIOACTIVE TITLE (ENGLISH): SUBSTANCES FROM THE BLOODSTREAM COMPOSITION ASSURANT UNE MEILLEURE ELIMINATION DE TITLE (FRENCH): SUBSTANCES BIOACTIVES CONTENUES DANS LE SYSTEME SANGUIN SELMER, Johan INVENTOR(S): NOVO NORDISK A/S; PATENT ASSIGNEE(S): SELMER, Johan English LANGUAGE OF PUBL.: Patent DOCUMENT TYPE: PATENT INFORMATION: KIND DATE NUMBER WO 9201469 A1 19920206 DESIGNATED STATES AT AU BE CA CH CS DE DK ES FI FR GB GR HU IT JP KR LU W: NL NO PL SE SU US A 19910724 WO 1991-DK215 APPLICATION INFO.: 19900724 DK 1990-1762/90 PRIORITY INFO.: ANSWER 10 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN L27 1989009625 PCTFULL ED 20020513 ACCESSION NUMBER: CONTRAST AGENTS FOR MAGNETIC RESONANCE IMAGING TITLE (ENGLISH): AMELIORATIONS APPORTEES A L'IMAGERIE PAR RESONANCE TITLE (FRENCH): MAGNETIQUE BERG, Arne; INVENTOR(S): KLAVENESS, Jo COCKBAIN, Julian, Roderick, Michaelson; PATENT ASSIGNEE(S): NYCOMED AS; BERG, Arne; KLAVENESS, Jo English LANGUAGE OF PUBL.: Patent DOCUMENT TYPE: PATENT INFORMATION: KIND DATE NUMBER WO 8909625 A1 19891019

DESIGNATED STATES

W: AT AU BE CH DE DK FI FR GB IT JP LU NL NO SE US

APPLICATION INFO.: WO 1989-EP376 A 19890406 PRIORITY INFO.: GB 1988-8808305.0 19880408

ANSWER 10 OF 10 COPYRIGHT 2006 Univentio on STN PCTFULL L27

DETD . .

. use of paramagnetic metal chelates, for example of aminopolycarboxylic acids such as nitrilotriacetic acid (NTA)j]NrNrN1rN'ethylenediaminetetraacetic acid (EDTA), N-hydroxyethyl--N, N1, N1-ethylenediaminetriacetic acid (HEDTA)r NrNrN'r-N'', N''-diethylenetriaminepentaacetic acid (DTPA), and 1,4,7,10-tetraazacyclododecanetetraacetic acid (DOTA) (see for example EP-A-71564, EP-A-130934t DE-A-3401052 and US-A-4639365). and Nycomed AS have suggested the use of paramagnetic metal chelates of iminodiacetic acids (see.

Intravenous administration, at separate timesf of the positive contrast agent Gd DTPA-dimeglumine (which following such administration rapidly distributes extracellularly) and of superparamagnetic ferrite. particles was proposed by Weissleder et al.'in AJR 150: 561-566 (1988) for imaging.

the reticuloendothelial system targetting negative contrast agents of W085/04330. However,, extracellularly distributing paramagnetic metal containing positive contrast agents, such as Gd DTPAF Gd DOTA and Od DTPA-BMA (the gadolinium chelate of the bismethylamide of DTPA), may be used according to the present invention for administration into body cavities or tracts having externally voiding ducts, e.g. for oral.

metal

chelates in which the paramagnetic metal species + 3+ especially Dy 3+ are particularly is Tb or Sm or more preferred, eag, Dy DTPA-BMAr, or DyDTPA-beta-alaninedextran (molecular weight 70000) where a blood pooling positive contrast agent is desired.

EDTA; DTPA-BMA; DOTA; desferrioxamine; and the physiologically acceptable salts thereof.

contrast agent,

if uniform distribution after i.v. administration is desired, one may conveniently use as the chelating moiety a hydrophilic extracellular substance, such as DTPA or DOTA or a chelating agent as claimed in W089/00557. However, to achieve tissue- or ductspecificity, for either positive or negative MRI contrast agents.

the same equipment against distilled water to a volume of 1150 ml, the pHwas adjusted to 9 with N-methylmorpholine and 29.18g of DTPA-bis-anhydride was added while the pH was kept at 8 using the same base. When the solution became clear, the reaction mixture was.

Gd 4.6%; N 2.15%; Na 0.16%; Cl less than 0101%, Free Gd (xylene orange titration), DTPA, GdDTPA? citric acid, or DMSO (HPLC): less than 0.01%

(The percentages in the analysis results are by weight).

in three of the dogs to which the positive and negative contrast agents were administered, 1.0 unit/kg bodyweight of cholecystokinin were given intravenously 60 minutes after administration of the paramagnetic contrast agent immediately followed by examinations in the transverse and frontal projections.

gall bladder was also encountered 15 to 30 minutes after contrast agent administration. After administration of the superparamagnetic and paramagnetic contrast agents and after cholecystokinin injection, the gall bladder was moderately contracted and visualization of the choledocus duct was achieved as well as contrast filling of the duodenum.

=> d ibib kwic 1-9

L27 ANSWER 1 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 2001076631 PCTFULL

no bibliographic data available - please use FPI for PI information

DESIGNATED STATES

DETD 37(4):449-57 [1997]; McHugh, PR. and Moran, TH., The stomach, cholecystokinin, and satiety, Fed. Proc. 45(5):13 84-90 [1986]; Lin, H.C. et al., Frequency ofgastric pacesetter potential depends on volume and site of distension,...

There may also be some interactions between 5-HT receptor-mediated effects and cholecystokinin-mediated effects on satiety. (Voight, J.P. et al., Evidencefor the involvement of the 5-HTIA receptor in CKK induced satiety in rats, Nauyn Schmiedebergs Arch. Pharmacol. 351(3):217-20 [1995]; Varga, G. et al., Effect of deramciclane, a new 5-HT receptor antagonist, on cholecystokinin -induced changes in ratgastrointesfinalfunction, Eur. J. Pharmacol. 367(2-3):315-23 [1999]; but see, Eberle-Wang, K. and Simansky, K.J., Yhe CKK-A receptor antagonist, devazepide, blocks. . .

2 o Behav. 43(3):943-47 [1992]). The neuropeptide hormone cholecystokinin is known to induce satiety, inhibit gastric emptying, and to stimulate digestive pancreatic and gall bladder activity. (Blevins, J.E. et al., Brain regions where cholecystokinin suppresses feeding in rats, Brain Res. 860(1-2):1-10 [2000]; Moran, TH. and McHugh, P.R., Cholecystokinin suppressesfood intake by inhibiting gastric emptying, Am. J. Physiol.

Cholecystokinin, and other neuropeptides, such as bombesin, arnylin, proopiomelanocortin, corticoptropin-releasing factor, galanin, melanin-concentrating hormone, neurotensin, agouti-related protein, leptin, and neuropeptide Y, are important 3. . .

```
(preferred dose range of 0 5 mg/kg), deramciclane (Varga,
      G. et al., Effect of deramciclane, a new 5-HT receptor antagonist, on
      cholecystokinin-
      1 0 induced changes in rat gastrointestinalfunction, Eur. J. Pharmacol.
      367(2-3):315-23
      [1999]), or alosetron. 5-HT4 receptor antagonists are preferably used at
      0 with phosphate buffer, pH 7.0, at 2 mL/min. 60 minutes after the start
      of the perfusion,
      5 1
      -20 [Xi of Tc-DTPA (diethylenetlianiinepentaacetic acid) was
      delivered as a bolus into
      the test segment. Intestinal transit was then measured by counting the
      radioactivity of.
      liquid marker across the approximately 150 cm intestinal test segment by
      delivering
      about 20 gCi 'Tc chelated to diethyltriamine pentaacetic acid (
       DTPA) (Cunningham,
       K.M. et al., Use of technicium-99m (V)thiocyanate to measure gastric
       emptying offat,
       J. Nucl. Med. 32:878-881 [1991]) as a bolus into the. . . gamma well
       counter. After correcting
       all counts to time zero, intestinal transit was calculated as the
       cumulative percent recovery
       of the delivered Tc-DTPA. This method has been well validated
       over the years and
       appreciated for its advantage of minimal inadvertent marker loss. To
       demonstrate.
                         PCTFULL COPYRIGHT 2006 Univentio on STN
       ANSWER 2 OF 10
                        1996040293 PCTFULL ED 20020514
ACCESSION NUMBER:
                        STRUCTURALLY DETERMINED METALLO-CONSTRUCTS AND
TITLE (ENGLISH):
                        APPLICATIONS
                        METALLO-ASSEMBLAGES DETERMINES STRUCTURALEMENT ET
TITLE (FRENCH):
                        APPLICATIONS
                        SHARMA, Shubh, D.
INVENTOR(S):
                        RHOMED INCORPORATED;
PATENT ASSIGNEE(S):
                        SHARMA, Shubh, D.
                        English
LANGUAGE OF PUBL.:
                        Patent
DOCUMENT TYPE:
PATENT INFORMATION:
                                           KIND
                        NUMBER
                                             A1 19961219
                        WO 9640293
DESIGNATED STATES
                        AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI
       W:
                        GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD
                        MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM
                        TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ
                        MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC
                        NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
                        WO 1996-US9840
                                                19960606
APPLICATION INFO.:
                        US 1995-8/476,652
                                                 19950607
PRIORITY INFO.:
                        US 1996-8/660,697
                                                 19960605
     . . . or Cu., to an equirnolar covalent
       adduct of diethylenetriaminepentaacetic acid (DT?A) with
       ethylenediamine. This adduct
       may be achieved by reacting ethylenediamine with DTPA
       -dianhydride. The amino group
       of the ethylenediamine moiety in this adduct, together with the free
       carboxylate of the DTPA
```

moiety, mimic the two primary integrin receptor-binding functionalities. The use of higher hornologues of ethylenediarnine, or use of other di-amines, such as. . a reversed turn structure as their hypothesized biologically active structure. The exan3ples of these include various peptide hormones such as somatostatin, cholecystokinin, opioid peptides, melanotropins, luteinizing hormone releasing hormone, tachykinins and various antibody epitopes. COPYRIGHT 2006 Univentio on STN ANSWER 3 OF 10 PCTFULL 1996039128 PCTFULL ED 20020514 ACCESSION NUMBER: PROTEIN PARTICLES FOR THERAPEUTIC AND DIAGNOSTIC USE TITLE (ENGLISH): PARTICULES PROTEIQUES A USAGE THERAPEUTIQUE ET TITLE (FRENCH): DIAGNOSTIQUE YEN, Richard, C., K. INVENTOR(S): HEMOSPHERE, INC.; PATENT ASSIGNEE(S): YEN, Richard, C., K. English LANGUAGE OF PUBL.: Patent DOCUMENT TYPE: PATENT INFORMATION: NUMBER KIND WO 9639128 A1 19961212 DESIGNATED STATES AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI W: GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG A 19960604 WO 1996-US9458 APPLICATION INFO .: 19950606 US 1995-8/471,650 PRIORITY INFO.: US 1995-8/554,919 19951109 . . factor beta receptor 14. anti-beta-lipoprotein 15. alpha 2-macroglobulin 16. streptokinase 17. anti-progesterone antibody 18. anti-leukotriene B4 antibody 19. CGGRGDF-NH2 20. doxorubicin 21. daunarubicin 22. EDTA-conjugated to HSA 23. DTPA-conjugated to HSA 24. technetium 25. gadolinium 26. HSA conjugated to FITC (Fluorescein Isothiocyanate) 27. HSA conjugated to TRITC (Tetramethylrhodamine B isothiocyanate) 28. HSA conjugated to. . . Tc99m can be achieved through direct covalent bonding or through a chelating agent. Examples of chelating agents are cysteine-cyclohexanol conjugate and DTPA Biologically active peptides: myl-L-Ala-D-Glu Amide N-Acetyl-Asp-Glu

L27

DETD

42

```
N-Acetyl-Cholecystokinin and its fragments
      N-Acetyl-Hirudin and its fragments
      Acetyl-Leu-Leu-Argininal
      N-Acetyl-Leu-Leu-Methioninal
      N-Acetyl-Leu-Leu-Norleucinal
      Acetyl-Met-Asp-Arg-Val-Leu-Ser-Arg-Tyr
      N-Acetyl-Met-Leu-Phe
      N-Acetylmuramyl-D-alanyl-D-isoglutamine
      N-Acetylmuramyl-L-alanyl-D-isoglutamine
      N-Acetylmuramyl-L-alanyl-L-isoglutamine
      N-Acetylmuramyl-Ala-D-isoglutaminyl-Ne-stearoyl-Lys
      N-Acetyl-Phe-Nle-Arg-Phe Amide
      Acetyl-Renin Substrate Tetradecapeptide
      Acetyl-Ser-Asp-Lys-Pro
      Acetyl-Ser-Gln-Asn-Tyr
      Acetyl-Ser-Gln-Asn-Tyr-Pro-Val-Val Amide.
      Carassin
       N-Carboxymethyl-Phe-Leu
      Cardioexcitatory Peptide
      alpha-Casein and fragments
      Beta-Casomorphin
      Na-CBZ-Arg-Arg-Pro-Phe-His-Sta-Ile-His-Ne-BOC-Lys Methyl
                                                                     Ester
      CBZ-Leu-Val-Gly Diazomethyl Ketone
      N-CBZ-D-Phe-Phe-Gly
       N-CBZ-Pro-D-Leu
      N-CBZ-Pro-Leu-Gly Hydroxamate
      CD4 and fragments
       Cecropins
      Cerebellin
       Chemostactic Peptides
         Cholecystokinin and fragments
      Chorionic Gonadotropin and fragments
       Chromostatin-20
      Chymostatin
      Circumsporozoite (CS) Protein of Plasmodium falciparum
       repetitive sequences
       Collagen
      Conotoxin GI
      A-conotoxin GIIIB
      w-conotoxin GVIA
       a-conotoxin SI
       Copper.
      NITR7, DM-nitrophen, NITRS/AM; Ammonium N-
      nitrosophenyl-hydroxylamine; Ammonium purpurate;
       alpha-Benzoin oxime; N, N-Bis-(hydroxyethyl)-glycine;
       2,3-butane-dione dioxime; Trans-1,2-Diaminocyclo-
      hexanetetra-acetic acid (CDTA); Diethylene-
       triaminopenta-acetic acid (DTPA); 4,5-Dihydroxy-
      benzene-1,3-disulphonic acid; 2,3-Dimercapto-1-
       Propanol; Diphenylthio-carbazone; 2,2'-Dipyridyl;
       3,6-Disulpho-1,8-dihydroxy-naphthalene;
       Dithiooxamide; Eriochrome Black T; Ethylene-diamine;
       Ethylenediaminetetraacetic acid (EDTA); (Ethylene-
       dioxy) -diethylenedinitrilo-tetraacetic acid (EGTA);
       o-Hydroxybenzaldehyde.
                         PCTFULL
                                   COPYRIGHT 2006 Univentio on STN
      ANSWER 4 OF 10
                        1995015118 PCTFULL ED 20020514
ACCESSION NUMBER:
                        GAS MICROSPHERES FOR TOPICAL AND SUBCUTANEOUS
TITLE (ENGLISH):
                        APPLICATION
                        MICROSPHERES GAZEUSES POUR APPLICATION TOPIQUE ET
TITLE (FRENCH):
```

SOUS-CUTANEE

UNGER, Evan, C.; INVENTOR(S):

MATSUNAGA, Terry; YELLOWHAIR, David

PATENT ASSIGNEE(S): UNGER, Evan, C.;

MATSUNAGA, Terry; YELLOWHAIR, David

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

KIND NUMBER WO 9515118 A1 19950608

DESIGNATED STATES

AU CA CN JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL W:

PT SE

A 19941130 APPLICATION INFO .: WO 1994-US13817 19931130 US 1993-8/159,674 PRIORITY INFO.: 19931130 US 1993-8/159,687 19931130 US 1993-8/160,232 US 1994-8/307,305 19940916.

19941129 US 1994-8/346,426

DETD . . . of topical or

subcutaneous application and delivery: melanin concentrating hormone,, melanin stimulating hormone, trypsin inhibitor, Bowman Burk inhibitor, luteinizing hormone releasing hormone (LHRH), bombesin, cholecystokinin, insulin, gastrin, endorphins, enkephalins, growth hormone, prolactin, oxytocin, follicle stimulating hormone (FSH), human chorionic gonadotropin,, corticotropin, 0 and lipotropin, calcitonin, glucagon, thyrotropin, elastin, cyclosporin,.

Suitable chelants and chelating agents include, but are not limited to: penicillamine; citrate; ascorbate; diethylenetriaminepentaacetic acid (DTPA), and derivatives and salts thereof; dihydroxypropylethylenediamine (DPEA), and derivatives and salts thereof; cyclohexanediaminetetraacetic acid (CHTA), and derivatives and salts thereof; ethylenediaminetetraacetic acid (EDTA), and. . . thereof; N,Nf-(1,2-ethanedivinylbis(oxy-2,1-phenylene))bis(N-(carboxymethyl) (BAPTA), and derivatives and salts thereof; aminophenol-triacetic acid (APTRA), and derivatives and salts thereof; tetrakis(2-pyridylmethyl)ethylenediamine (TPEN), and derivatives and salts thereof; 1.4,7,10-tetraazacyclodecane (DOTA) and derivatives and salts thereof; and cyanins and their derivatives, Furthermore, immunosuppressants or antiinflammatory preparations can be incorporated into the gas and gaseous. .

These metal ions may be incorporated into the microspheres as free salts, as complexes, e,g., with EDTA, DTPA, DOTA desferrioxamine, or as oxides of the metal ions, Additionally, derivatized complexes of the metal ions may be bound to lipid head groups, . .

CLMEN. . . peptides selected from the group consisting of melanin concentrating hormone, melanin stimulating hormone, trypsin inhibitor, Bowman Burk inhibitor, luteinizing hormone releasing hormone, bombesin, cholecystokinin, insulin, gastrin, endorphins, enkephalins, growth hormone, prolactin, oxytocin, follicle stimulating hormone, human chorionic gonadotropin, corticotropin, 0-lipotropin, 7-lipotropin,

calcitonin, glucagon, thyrotropin, elastin, cyclosporin, and collagen, and . . .

peptides selected from the group consisting of melanin concentrating hormone, melanin stimulating hormone, trypsin inhibitor, Bowman Burk inhibitor, luteinizing hormone releasing hormone, bombesin, cholecystokinin, insulin, 10 gastrin, endorphins, enkephalins, growth hormone, prolactin, oxytocin, follicle stimulating hormone, human chorionic gonadotropin, corticotropin, fl-lipotropin, T-lipotropin, calcitonin, glucagon, thyrotropin, elastin, cyclosporin, and collagen, . . .

L27 ANSWER 5 OF 10

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1995005842 PCTFULL ED 20020514

TITLE (ENGLISH):

METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE

DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION

TITLE (FRENCH):

PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES

DYSFONCTIONNEMENTS DES MUSCLES LISSES

INVENTOR(S):

DOCUMENT TYPE:

PASRICHA, Pankaj, J.; KALLOO, Anthony, N.

KA

PATENT ASSIGNEE(S):

THE JOHNS HOPKINS UNIVERSITY

Patent

NUMBER

PATENT INFORMATION:

KIND DATE

WO 9505842 Al 1

A1 19950302

DESIGNATED STATES

W:

CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO.:

WO 1994-US9759 A 19940823

PRIORITY INFO.:

US 1993-112,088 19930826

DETD Figs. 3A and B show the effect of intrasphincteric injection of BoTx on LES response to cholecystokinin octapeptide (CCK)

0.01). The response of the LES to the IV administration of edrophonium (Tensilon; ICN Pharmaceuticals Inc., Costa Mesa, CA) and cholecystokinin

octapeptide (CCK-8) (Kinevac; ER Squibb amp; Sons,

Princeton, NJ) in three

additional piglets was also measured. LES pressures, measured by a ${\tt DENTSLEEVE}$, were. . .

retention studies

After an overnight fast, patients were asked to ingest a corn-flake meal with milk containing 0.531 mci 99 aiTc DTPA. Subsequently,

serial dynamic

images were obtained with the subject sitting erect in front of a gamma camera.

Retention was expressed. . .

L27 ANSWER 6 OF 10

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1994004674 PCTFULL ED 20020513

TITLE (ENGLISH):
TITLE (FRENCH):

HUMAN MELANOCYTE STIMULATING HORMONE RECEPTOR RECEPTEUR D'HORMONE STIMULANT LE MELANOCYTE CHEZ

L'HOMME

INVENTOR(S):

WIKBERG, Jarl; CHHAJLANI, Vijay

PATENT ASSIGNEE(S):

WIKBERG, Jarl;

TATENT NOOTONED (O):

CHHAJLANI, Vijay

LANGUAGE OF PUBL.:

English Patent

DOCUMENT TYPE: PATENT INFORMATION:

NUMBER

KIND DATE

WO 9404674 A1 19940303

DESIGNATED STATES

W:

AU BB BG BR BY CA CZ FI HU JP KP KR KZ LK MG MN MW NO NZ PL RO RU SD SK UA US VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE

SN TD TG

APPLICATION INFO.: PRIORITY INFO.:

WO 1993-DK273 A 19930820 DK 1992-1046/92 19920821 DK 1992-1118/92 19920910 DK 1993-528/93 19930505

DETD . . the

substance P receptor, substance K receptor, endothelin receptor, angiotensin receptor, chemoattractant peptide receptor, bombesin receptor, oxytocin receptor, vasopressin receptor, antidiuretic hormone receptor, gastrin receptor, cholecystokinin receptor, canabinoid receptor, follicle stimulating hormone receptor, luteinizing hormone receptor, growth hormone receptor, thyrotropin receptor, calcitonin receptor, calcitonin gene related peptide receptor and/or parathyroid.

isothiocyanatobenzyl EDTA (CITC), diethylenetriaminepenta-acetic acid (DTPA) and be coupled via the mixed anhydride or the cyclic anhydride (Hnatowich 1990). However, since such complexes may provide somewhat unstable chelation and moreover during their manufacture intra and intermolecular cross linking of antibodies, other chelators such as e.g. GYK-DTPA or SCN-Bz-DTPA may be used as an alternative (Hnatowich 1990). Radiolabelling of 99mTc to the antibody may be afforded by using direct labelling techniques. . .

L27 ANSWER 7 OF 10

PCTFULL COPYRIGHT 2006 Univentio on STN .

ACCESSION NUMBER:

1993018797 PCTFULL ED 20020513

TITLE (ENGLISH):

METHOD OF INTRAOPERATIVELY DETECTING AND LOCATING

TUMORAL TISSUES

TITLE (FRENCH):

PROCEDE POUR DETECTER ET LOCALISER DE FACON

PEROPERATOIRE DES TISSUS TUMORAUX

INVENTOR(S):

ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

PATENT ASSIGNEE(S): MALLI

MALLINCKRODT MEDICAL, INC.;

ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

LANGUAGE OF PUBL.:

English Patent

DOCUMENT TYPE:
PATENT INFORMATION:

DESIGNATED STATES

W:

AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL

PT SE

APPLICATION INFO.: PRIORITY INFO.:

WO 1993-US2772 A 19930324 NL 1992-92200848.7 19920325

DETD . . thyroid-stimulating hormone,

vasoactive intestinal polypeptide, prolactin, thyrotropin-releasing

hormone, insulin,

adrenocorticotropic hormone (ACTH), in particular o(--MSH

(melanocyte-stimulating

hormone) and f -(methylsulfonyl)-L- c4-aminobutyryl-L-

d-glutamyl-L-histidyl-L-

0 phenylaianyl-D-lysyl-L-phenylaianine, cholecystokinin, corticotropin-releasing hormone (CRH), growth hormone-releasing hormone (GRH), arginine and vasopressin, oxytocin, glucagon, secretin, parathyroid hormone (PTH) and related peptide. bond to an amino group of said peptide and is derived from ethylene diamine tetra-acetic acid (EDTA), ethylene triamine penta-acetic acid (DTPA), ethyleneglycol-0,0'-bis(2aminoethyl)-N,N,N',N'-tetra-acetic acid (EGTA), N,N-bis(hydroxybenzyl)ethylenediamine-N, N'-diacetic acid (HBED), triethylene tetramine hexa-acetic acid (TTHA), 1,4,7,10-tetraazacyclododecane-N,N',N,N'-tetra-acetic acid (DOTA), 1 8,11-tetra-azacyclotetradecane-NN',N,N'-tetra-acetic (TETA),, 1 diaminocyclohexane tetra-acetic acid (DCTA), substituted substituted EDTA, or from a compound of the general formula -R-S] Y wherein R is a branched or non-branched, optionally substituted hydrocarbyl radical,. A, Preparation of DTPA-Octreotide kit The DTPA-Octreotide kit formulated on basis of sodium acetate buffer with the final composition 3,89 mg sodium acetate 0,029 mg acetic acid 10 gg DTPA-Octreotide per vial is prepared as follows. To formulate the kit, 0,5 mg of DTPA-Octreotide is dissolved in 4 ml of acetic acid solution, and 5 ml of sodium acetate solution are added. In a similar way, starting from 2.5 mg DTPA-Octreotide was also prepared and a kit containing 50gg DTPA-Octreotide per vial. C, Labelling of DTPA-Octreotide kit with Tb Several kits of DTPA-Octreotide, prepared according to Example I containing 10 or 50 gg DTPA-Octreotide, are labelled by addition of 0.5 ml of Tb-161 solution obtained under B. The mixture is incubated for 30 min. at room temperature. ITLC as described above, Tb DTPA-Octreotide Rf ca 0 0.6 Free Tb-161 Rf ca 0,9 0 Hydrolysed Tb-161 Rf ca 0 0,1 HPLC: Column: gBondapakBC 18 10pn, 3.9 x. >92% 78.4% >93% challenge experiment with serum (bovine), added at 24 h Free Tb-161 was not detectable in any kit containing 50 gg DTPA-Octreotide.

h - HPLC 96.2%

HPLC identification positive, because UV spectrum and activity peaks of Tb-161 are found identical with those for In-III labelled DTPA-Octreotide used as control.

EXAMPLE 11

Labelling of DTPA-Octreotide kit with Yb-175 and its use in combination with detectincr agent DTPA I-Tvr'-Octreotide A. Labellincf of DTPA-Octreotide kit with Yb Ca 1 mg of enriched (97.8%) 174-Yb2O2 is irradiated for 48 hours in a nuclear reactor with thermal.

Several kits containing 10 gg of DTPA-Octreotide prepared according to Example I are labelled by addition of I ml of the Yb-175 stock solution. The mixture is let to-incubate

Yb-175 Octreotide: LY at 3 ho ITLC Rf 0 06 91,2% at 24 h. ITLC Rf 0,5-06 91,7% B, Preiparation of DTPA 125-Tyr3-Octreotide.

DTPA-Tyr3-Octreotide of the formula DTPA- (D) Phe-Cys -Tyr*- (D) Trp-Lys -Thr-Cys -Throl is prepared from Tyr3-Octreotide in a corresponding manner as described in Int, Pat, Appln, WO. . . Example 1, and further iodinated with 125I sodium iodide, dissolved in phosphate buffer in the presence of chloramine T. The molar ratio of DTPA-Tyr3-Octreotide; chloramine T: 125-I is 1:4,6:0,6 The reaction is terminated with 10% BSA solution. The labelled product of the above formula wherein Tyr) =.

To combine the therapeutical effect with the radioguided surgery are used both preparations; Yb Octreotide for the desired therapeutic effect and DTPA I-Tyr 3_ Octreotide as the detectingu agent, Depending on the conditions, they can be used separately, in this case by administering Yb Octreotide first to cause partial or deep tumour necrosis, followed by administration of DTPA I-Tyr3-Octreotide to guide the tumours removal, or they can be administered simultaneously as a mixture in an appropriate ratio. Such a mixture. . .

EXAMPLE III

Labelling of DTPA-Octreotide kit with Ho-166 and its use in combination with Octreotide labelled with Tb A. Labelling of DTPA-Octreotide kit with Ho 6-Ca 1 mg of natural (monoisotopic) 165-Ho2O3 is irradiated for 48 hours in nuclear reactor with a thermal. . .

Several kits, containing lOgg of DTPA-Octreotide prepared according to Example I., are labelled by addition of 0.5 or 1 ml of Ho-166 stock solution. The mixture is let. . .

Labelled Ho Octreotide 9111% Free Ho-166 8,9% B. Pre-oaration of DTPA-Tb Octreotide as described in Example I., with kit containing 50 Ltq DTPA-Octreotide.

CLMEN. . . amide bond to an amino group of said peptide and being derived from ethylene diamine tetra-acetic acid (EDTA), diethylene triamine penta-acetic acid (DTPA), ethyleneglycol-0,01bis(2-aminoethyl)-N,N,N',N'-tetra-acetic acid (EGTA), N, N. bis (hydroxybenzyl) -

ethylenediamine-N,N'-diacetic acid (HBED), triethylene tetramine hexa-acetic acid (TTHA), 1,4,7,10-tetraazacyclododecane-N,N,N,Nf-tetra-acetic acid (DOTA),, 1 8,,11-tetra-azacyclotetradecane-N,N',N,N'-tetra-acetic acid (TETA), 1,2-diaminocyclohexane tetra-acetic acid (DCTA), substituted DTPA, substituted EDTA, or from a compound of the general formula NO wherein R is a branched or non-branched, optionally substituted hydrocarbyl radical, which may be. . .

L27 ANSWER 8 OF 10 ACCESSION NUMBER:

PCTFULL COPYRIGHT 2006 Univentio on STN

1992004916 PCTFULL ED 20020513

TITLE (ENGLISH): PARTICULATE AGENTS

TITLE (FRENCH): AGENTS SOUS FORME DE PARTICULES

INVENTOR(S): FILLER, Aaron, Gershon

PATENT ASSIGNEE(S): ST. GEORGE'S ENTERPRISES LIMITED;

FILLER, Aaron, Gershon....

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

DESIGNATED STATES

₩:

APPLICATION INFO.: PRIORITY INFO.:

| | | | | • | | | | | | | | | | | |
|----|----------|------|-----|----|----|-----|------|-----|----|----|----|----|----|----|----|
| AT | AU BE CA | СН | DE | DK | ES | FR | GB | GR | ΙT | JP | LU | NL | NO | SE | US |
| WO | 1991-EP1 | 780 | | | Α | 199 | 9109 | 913 | | | | | | | |
| GB | 1990-902 | 007 | 5.9 | | | 199 | 900 | 914 | | | | | | | |
| GB | 1990-902 | 3580 | 0.5 | | | 199 | 901 | 030 | | | | | | | |
| GB | 1990-902 | 729 | 3.1 | | | 199 | 901: | 217 | | | | | | | |
| GB | 1991-910 | 023 | 3.7 | | | 199 | 910: | 107 | | | | | | | |
| GB | 1991-910 | 098 | 1.1 | | | 199 | 910: | 116 | | | | | | | |
| GB | 1991-910 | 214 | 6.9 | | | 199 | 910 | 131 | | | | | | | |
| GB | 1991-911 | 087 | 6.1 | | | 199 | 910 | 520 | | | | | | | |
| GB | 1991-911 | 637 | 3.3 | | | 199 | 910 | 730 | | | | | | | |
| GB | 1991-911 | 785 | 1.7 | | | | 910 | | | | | | | | |
| GB | 1991-911 | 867 | 6.7 | | | 199 | 910 | 330 | | | | | | | |

DETD Paramagnetic contrast agents such as gadolinium-DTPA act primarily by altering T, relaxation rates.

its ease of use as a histocheiAcal marker. Other studies have demonstrated transport of a wide variety of substances including Vasoactive Intestinal Polypeptide (VIP),

cholecystokinin, substance P and somatostatin, neuropeptide-Y, and adriamycin. These types of tracers have sometimes been introduced by intravenous injection with subsequent uptake by neurons. . .

The use of a magnetic resonance small molecule contrast agent such as gadolinium-DTPA (diethylenetriaminepentaacetic acid) required the introduction of a very high concentration into the nerve and this amount was beyond what could be achieved,. . .

6) A wide variety of peptides and small proteins such as endorphins, vasoactive intestinal polypeptide, calcitonin gene-related peptide, cholecystokinin, substance P, somatostatin, and neuropeptide Y or the relevant portions of such peptides for the encouragement - 53

of neuronal uptake and transport.

Additional types of agents for imaging include paramagnetic metal chelates of polychelants (e.g. polylysine gadolinium-DTPA 40 which uses the macromolecularlparticulate aspects of uptake to introduce groups of paramagnetic nuclei (40 Gd atoms per molecule) (see EP-A-305320, EP-A-357622, EP-A-355097, EP-A-331616,...

L27 ANSWER 9 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1992001469 PCTFULL ED 20020513

TITLE (ENGLISH): A COMPOSITION PROVIDING IMPROVED CLEARANCE OF BIOACTIVE

SUBSTANCES FROM THE BLOODSTREAM

TITLE (FRENCH): COMPOSITION ASSURANT UNE MEILLEURE ELIMINATION DE

SUBSTANCES BIOACTIVES CONTENUES DANS LE SYSTEME SANGUIN

INVENTOR(S): SELMER, Johan

PATENT ASSIGNEE(S): NOVO NORDISK A/S;

SELMER, Johan

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE
----WO 9201469 A1 19920206

DESIGNATED STATES

W:

AT AU BE CA CH CS DE DK ES FI FR GB GR HU IT JP KR LU

NL NO PL SE SU US

APPLICATION INFO.: PRIORITY INFO.:

WO 1991-DK215 A 19910724 DK 1990-1762/90 19900724

DETD . . . radioimaging leukocytes by injecting a conjugate of an antibody reactive with a leukocyt6 surface molecule and a radioisotope chelated with an EDTA or DTPA derivative followed by the injection of an antibody against the conjugate in order to clear the conjugate/antibody complex through the reticuloendothelial system. . .

hormone,,; follicle-Stimulating hormone,, luteinising hormoner adrenocorticotropic hormone, parathyroidea hormone, prolactin, lipotropin J, cholecystokinin, calcitonin, secretin, atrialnatriuretic factor, endothelin, vasoactive intestinal polypeptider transferrin, tachykinin Intercellular adhesion factors intercellular adhesion molecule 1, endothelial leukocyte. . .

=> octapeptide
OCTAPEPTIDE IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

```
=> s octapeptide
         1500 OCTAPEPTIDE
          238 OCTAPEPTIDES
         1631 OCTAPEPTIDE
L28
                 (OCTAPEPTIDE OR OCTAPEPTIDES)
=> s 128 and (DTPA or DOTA)
         5576 DTPA
           12 DTPAS
          5579 DTPA
                 (DTPA OR DTPAS)
         1767 DOTA
            5 DOTAS
         1768 DOTA
                 (DOTA OR DOTAS)
L29
            86 L28 AND (DTPA OR DOTA)
=> s 129 not py>1996
        935225 PY>1996
           15 L29 NOT PY>1996
L30
=> s 130 and CCK
         2003 CCK
            36 CCKS
          2007 CCK
                 (CCK OR CCKS)
            1 L30 AND CCK
L31
=> d ibib
                        PCTFULL COPYRIGHT 2006 Univentio on STN
      ANSWER 1 OF 1
                        1995005842 PCTFULL ED 20020514
ACCESSION NUMBER:
                        METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE
TITLE (ENGLISH):
                        DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION
                        PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES
TITLE (FRENCH):
                        MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES
                        DYSFONCTIONNEMENTS DES MUSCLES LISSES
                        PASRICHA, Pankaj, J.;
INVENTOR(S):
                        KALLOO, Anthony, N.
PATENT ASSIGNEE(S):
                        THE JOHNS HOPKINS UNIVERSITY
DOCUMENT TYPE:
                        Patent
PATENT INFORMATION:
                                          KIND
                                                   DATE
                        NUMBER
                        ______
                                            A1 19950302
                        WO 9505842
DESIGNATED STATES
                        CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
      ₩:
                        WO 1994-US9759 A 19940823:
APPLICATION INFO .:
                                                19930826
                        US 1993-112,088
PRIORITY INFO.:
=> d kwic
                                   COPYRIGHT 2006 Univentio on STN
L31
      ANSWER 1 OF 1
                         PCTFULL
      Figs. 3A and B show the effect of intrasphincteric injection of BoTx on
DETD
      LES response to cholecystokinin octapeptide (CCK)
      The response of the LES to the IV administration of edrophonium
       (Tensilon; ICN Pharmaceuticals Inc., Costa Mesa, CA) and cholecystokinin
         octapeptide (CCK-8) (Kinevac; ER Squibb amp; Sons,
       Princeton, NJ) in three
       additional piglets was also measured. LES pressures, measured by a
```

DENTSLEEVE, were recorded in response to IV edrophonium (5 mg). After a

SUBSTITUTE SHEET (RULE 26)

```
washout period of 10 minutes, CCK (5 µ g IV) was then
      administered.
      Subsequently, BoTx was injected into the LES, as described above, and
      the
      experiment was. . .
      Intrasphincteric BoTx also altered the response of the LES to
       (Figure 3). In untreated piglets, CCK did not cause any
      significant change in
      LES pressure. However, after intrasphincteric BoTx injection, a
      significant
      increase in LES pressure was seen in response to CCK. It
      should be noted that
      despite what was felt to be an adequate washout period (10 minutes) in
      injections, basal. . .
      retention studies
      After an overnight fast, patients were asked to ingest a corn-flake meal
      with milk containing 0.531 mci 99 aiTc DTPA. Subsequently,
      serial dynamic
      images were obtained with the subject sitting erect in front of a gamma
      camera.
      Retention was expressed.
=> d his
     (FILE 'HOME' ENTERED AT 13:35:48 ON 07 DEC 2006)
     FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006
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            424 S DYMGWMDF/SQSP
     FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006
             84 S L1
              0 S DPTA AND L3
              5 S DOTA AND L3
       . 134722 S CHELAT?
             12 S L6 AND L3
              0 S L7 NOT PY>1997
              1 S L7 NOT PY>1998
           4485 S L2
             49 S L10 AND L6
             20 S L11 NOT PY>1997
             20 S L11 NOT PY>1996
          14458 S METAL CHELAT?
              3 S L14 AND L10
              4 S L10 AND (DPTA OR DOTA)
              9 S L10 AND DTPA
     FILE 'DISSABS' ENTERED AT 13:46:43 ON 07 DEC 2006
            323 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8)).
            360 S DTPA OR DOTA
              2 S L19 AND L18
            497 S METAL CHELAT?
              0 S L21 AND L18
     FILE 'PCTFULL' ENTERED AT 13:50:53 ON 07 DEC 2006
           2006 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8))
           2224 S DPTA OR DOTA
           6121 S DTPA OR DOTA
           110 S L25 AND L23
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L1

L2

L3

L4

L5

L6 L7

L8L9

L10

L11

L12 L13

L14

L15

L16

L17

L18

L19

L20 L21

L22

L23

L24

L25

L26

L27

10 S L26 NOT PY>1996

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1631 S OCTAPEPTIDE
             86 S L28 AND (DTPA OR DOTA)
L29
             15 S L29 NOT PY>1996
L30
              1 S L30 AND CCK
L31
=> s 123 and chelat?
         44321 CHELAT?
           591 L23 AND CHELAT?
L32
=> s 132 and (radio? or imag?)
        190519 RADIO?
        202203 IMAG?
           495 L32 AND (RADIO? OR IMAG?)
L33
=> s 133 not py>1996
        935225 PY>1996
            34 L33 NOT PY>1996
L34
=> d his
     (FILE 'HOME' ENTERED AT 13:35:48 ON 07-DEG-2006)
     FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006
            136 S DY'NLE'GW'NLE'DF/SQSP
L1
            424 S DYMGWMDF/SQSP
L2
     FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006
             84 S L1
L3
              0 S DPTA AND L3
L4
              5 S DOTA AND L3
L5
L6
         134722 S CHELAT?
             12 S L6 AND L3
L7
              0 S L7 NOT PY>1997
\Gamma8
              1 S L7 NOT PY>1998
L9
           4485 S L2
L10
             49 S L10 AND L6
L11
             20 S L11 NOT PY>1997
L12
             20 S L11 NOT PY>1996
L13
          14458 S METAL CHELAT?
L14
              3 S L14 AND L10
L15
              4 S L10 AND (DPTA OR DOTA)
L16
              9 S L10 AND DTPA
L17
     FILE 'DISSABS' ENTERED AT 13:46:43 ON 07 DEC 2006
            323 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8))
L18
            360 S DTPA OR DOTA
L19
              2 S L19 AND L18
L20
            497 S METAL CHELAT?
L21
             0 S L21 AND L18
L22
     FILE 'PCTFULL' ENTERED AT 13:50:53 ON 07 DEC 2006
           2006 S CHOLECYSTOKININ'OR (CCK-8 OR CCK8 OR (CCK () 8))
L23
           2224 S DPTA OR DOTA
L24
           6121 S DTPA OR DOTA
L25
            110 S L25 AND L23
L26
             10 S L26 NOT PY>1996
L27
L28
           1631 S OCTAPEPTIDE
             86 S L28 AND (DTPA OR DOTA)
L29
             15 S L29 NOT PY>1996
L30
              1 S L30 AND CCK
L31
            591 S L23 AND CHELAT?
L32
            495 S L32 AND (RADIO? OR IMAG?)
L33
             34 S L33 NOT PY>1996
L34
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=> d ibib 1-8 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 1 OF 8 1996039161 PCTFULL ED 20020514 ACCESSION NUMBER: MULTI-TYROSINATED SOMATOSTATIN ANALOGS TITLE (ENGLISH): ANALOGUES DE LA SOMATOSTATINE CONTENANT PLUSIEURS DE TITLE (FRENCH): TYROSINES COY, David, H.; INVENTOR(S): WOLTERING, Eugene, A.; O'DORISIO, M., Sue; O'DORISIO, Thomas, M.; MURPHY, William, A. THE ADMINISTRATORS OF THE TULANE EDUCATIONAL FUND ; PATENT ASSIGNEE(S): THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION; THE LOUISIANA STATE UNIVERSITY MEDICAL CENTER FOUNDATION; CHILDREN'S HOSPITAL, INC. English LANGUAGE OF PUBL.: Patent DOCUMENT TYPE: PATENT INFORMATION: KIND DATE NUMBER ______ A1 19961212 WO 9639161 DESIGNATED STATES AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI W: GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG WO 1996-US8437 A 19960603 APPLICATION INFO.: 19950605 US 1995-8/462,223 PRIORITY INFO.: PCTFULL COPYRIGHT 2006 Univentio on STN L35 ANSWER 2 OF 8 1994023724 PCTFULL ED 20020513 ACCESSION NUMBER: MEMBRANE-PERMEANT SECOND MESSENGERS TITLE (ENGLISH): MESSAGERS SECONDAIRES S'INFILTRANT DANS LA MEMBRANE TITLE (FRENCH): CELLULAIRE TSIEN, Roger, Y.; INVENTOR(S): SCHULTZ, Carsten THE REGENTS OF THE UNIVERSITY OF CALIFORNIA PATENT ASSIGNEE(S): LANGUAGE OF PUBL.: English Patent DOCUMENT TYPE: PATENT INFORMATION: KIND DATE NUMBER ______ Al 19941027 WO 9423724 DESIGNATED STATES AU BB BG BR BY CA CN CZ FI HU JP KP KR KZ LK LV MG MN W: MW NO NZ PL RO RU SD SI SK UA UZ VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN

FR GB GR IE IT LU MC NL PT SE BF I ML MR NE SN TD TG WO 1994-US3889 A 19940408

APPLICATION INFO.: WO 1994-US3889 A 19940408 PRIORITY INFO.: US 1993-45,585 19930409

L35 ANSWER 3 OF 8 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 1994022444 PCTFULL ED 20020513
TITLE (ENGLISH): TRICYCLIC COMPOUNDS FOR INHIBITING PLATELET AGGREGATION
TITLE (FRENCH): COMPOSES TRICYCLIQUES UTILISES POUR INHIBER

L'AGREGATION PLAQUETTAIRE INVENTOR(S): CALLAHAN, James, Francis; HUFFMAN, William, F.

PATENT ASSIGNEE(S): SMITHKLINE BEECHAM CORPORATION;

CALLAHAN, James, Francis;

HUFFMAN, William, F.

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 9422444

A1 19941013

DESIGNATED STATES

W:

JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE WO 1994-US3383 A 19940329

APPLICATION INFO.: PRIORITY INFO.:

US 1993-8/038,382 19930329

ANSWER 4 OF 8 L35 ACCESSION NUMBER:

PCTFULL COPYRIGHT 2006 Univentio on STN

1993008842 PCTFULL ED 20020513

TITLE (ENGLISH):

HEMOGLOBINS AS DRUG DELIVERY AGENTS

TITLE (FRENCH):

HEMOGLOBINES UTILISEES COMME AGENTS ADMINISTRATEURS DE

MEDICAMENTS

INVENTOR(S):

ANDERSON, David, C.; MATHEWS, Antony, James

PATENT ASSIGNEE(S):

SOMATOGEN, INC.; ANDERSON, David, C.; MATHEWS, Antony, James

LANGUAGE OF PUBL.:

English

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

KIND DATE NUMBER ______

WO 9308842

Al 19930513

DESIGNATED STATES

W:

AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE UA US AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE BF BJ CF CG CI CM GA GN

ML MR SN TD TG

APPLICATION INFO .: PRIORITY INFO.:

WO 1992-US9713 US 1991-789,177 US 1991-789,179

A 19921106 19911108 19911108

ANSWER 5 OF 8 T.35

ACCESSION NUMBER:

PCTFULL COPYRIGHT 2006 Univentio on STN

1993000095 PCTFULL ED 20020513 BICYCLIC FIBRINOGEN ANTAGONISTS

TITLE (ENGLISH): TITLE (FRENCH): INVENTOR(S):

ANTAGONISTES BICYCLIQUES DE FIBRINOGENE

BONDINELL, William, Edward; CALLAHAN, James, Francis; HUFFMAN, William, Francis; KEENAN, Richard, McCulloch;

KU, Thomas, Wen-Fu;

NEWLANDER, Kenneth, Allen-

PATENT ASSIGNEE(S):

SMITHKLINE BEECHAM CORPORATION; BONDINELL, William, Edward; CALLAHAN, James, Francis; HUFFMAN, William, Francis; KEENAN, Richard, McCulloch;

KU, Thomas, Wen-Fu;

NEWLANDER, Kenneth, Allen

LANGUAGE OF PUBL.:

DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

KIND DATE NUMBER A2 19930107 WO 9300095

DESIGNATED STATES

W:

AU CA JP KR US AT BE CH DE DK ES FR GB GR IT LU MC NL

APPLICATION INFO.:

WO 1992-US5463 A 19920626

US 1991-723,009 PRIORITY INFO.: 19910628

PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 6 OF 8 1991019733 PCTFULL ED 20020513 ACCESSION NUMBER:

DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS TITLE (ENGLISH): DERIVES DE TETRAPEPTIDES EN TANT QU'AGONISTES DE

TITLE (FRENCH): CHOLECYSTOKININE SHIOSAKI, Kazumi; INVENTOR(S):

NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kona; HOLLADAY, Mark, W.; LIN, Chun, W.; NELLANS, Hugh, N.

ABBOTT LABORATORIES PATENT ASSIGNEE(S):

English LANGUAGE OF PUBL.: DOCUMENT TYPE: Patent PATENT INFORMATION:

KIND DATE NUMBER ______

A1 19911226 WO 9119733 DESIGNATED STATES

AT BE CA CH DE DK ES FR GB GR IT JP LU NL SE W:

WO 1991-US4458 A 19910620 APPLICATION INFO .: 19900620 US 1990-541,230 PRIORITY INFO.: 19910614 US 1991-713,010

PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 7 OF 8 L35 1990006937 PCTFULL ED 20020513 ACCESSION NUMBER:

DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS TITLE (ENGLISH): DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS TITLE (FRENCH):

REPRODUISANT L'ACTIVITE DE LA CCK

SHIOSAKI, Kazumi; INVENTOR(S): NADZAN, Alex, M.;

KOPECKA, Hana; SHUE, Youe-Kong ABBOTT LABORATORIES;

PATENT ASSIGNEE(S): SHIOSAKI, Kazumi;

NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

English LANGUAGE OF PUBL.: DOCUMENT TYPE: Patent

PATENT INFORMATION:

KIND DATE NUMBER ______ A1 19900628 WO 9006937

DESIGNATED STATES

BE CH DE ES FR GB IT JP NL SE US W: WO 1989-US5673 A 19891218 APPLICATION INFO.: US 1988-287,955 19881221 PRIORITY INFO.:

PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 8 OF 8 1990006128 PCTFULL ED 20020513

ACCESSION NUMBER: METHODS AND COMPOSITIONS FOR INHIBITING PLATELET TITLE (ENGLISH):

AGGREGATION

METHODES ET COMPOSITIONS POUR INHIBER L'AGREGATION DES TITLE (FRENCH):

PLAOUETTES

MARAGANORE, John, M.; INVENTOR(S):

JAKUBOWSKI, Joseph, A. BIOGEN, INC.; PATENT ASSIGNEE(S):

TRUSTEES OF BOSTON UNIVERSITY

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent PATENT INFORMATION:

NUMBER KIND DATE WO 9006128 . A1 19900614 DK FI HU JP KR NO WO 1989-US849 A 19890302 US 1988-280,618 19881205 (CCK OR CCKS) 5 L35 AND CCK PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 1 OF 5 1996039161 PCTFULL ED 20020514 ACCESSION NUMBER: MULTI-TYROSINATED SOMATOSTATIN ANALOGS ANALOGUES DE LA SOMATOSTATINE CONTENANT PLUSIEURS DE TYROSINES COY, David, H.; WOLTERING, Eugene, A.; O'DORISIO, M., Sue; O'DORISIO, Thomas, M.; MURPHY, William, A. THE ADMINISTRATORS OF THE TULANE EDUCATIONAL FUND ; THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION; THE LOUISIANA STATE UNIVERSITY MEDICAL CENTER FOUNDATION; CHILDREN'S HOSPITAL, INC. English Patent NUMBER KIND DATE ______ WO 9639161 Al 19961212 AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG WO 1996-US8437 A 19960603 US 1995-8/462,223 19950605 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 2 OF 5 1994023724 PCTFULL ED 20020513 MEMBRANE-PERMEANT SECOND MESSENGERS MESSAGERS SECONDAIRES S'INFILTRANT DANS LA MEMBRANE CELLULAIRE TSIEN, Roger, Y.; SCHULTZ, Carsten THE REGENTS OF THE UNIVERSITY OF CALIFORNIA English Patent

DESIGNATED STATES

DESIGNATED STATES

W: APPLICATION INFO .:

PRIORITY INFO.:

=> s 135 and cck

=> d ibib 1-5

TITLE (ENGLISH):

PATENT ASSIGNEE(S):

LANGUAGE OF PUBL.: DOCUMENT TYPE:

PATENT INFORMATION:

DESIGNATED STATES

APPLICATION INFO.:

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

LANGUAGE OF PUBL.:

PRIORITY INFO.:

TITLE (ENGLISH):

TITLE (FRENCH):

INVENTOR(S):

DOCUMENT TYPE: PATENT INFORMATION:

W:

TITLE (FRENCH):

INVENTOR(S):

L36

2003 CCK 36 CCKS 2007 CCK

W:

AU BB BG BR BY CA CN CZ FI HU JP KP KR KZ LK LV MG MN

KIND DATE

A1 19941027

NUMBER

WO 9423724

MW NO NZ PL RO RU SD SI SK UA UZ VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG WO 1994-US3889 A 19940408 US 1993-45,585 19930409 PCTFULL COPYRIGHT 2006 Univentio on STN 1993008842 PCTFULL ED 20020513 HEMOGLOBINS AS DRUG DELIVERY AGENTS HEMOGLOBINES UTILISEES COMME AGENTS ADMINISTRATEURS DE **MEDICAMENTS** ANDERSON, David, C.; MATHEWS, Antony, James SOMATOGEN, INC.; ANDERSON, David, C.; MATHEWS, Antony, James English Patent KIND DATE NUMBER _______ WO 9308842 Al 19930513 AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE UA US AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE BF BJ CF CG CI CM GA GN ML MR SN TD TG WO 1992-US9713 A 19921106 19911108 US 1991-789,177 19911108 US 1991-789,179 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 4 OF 5 1991019733 PCTFULL ED 20020513 DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS DERIVES DE TETRAPEPTIDES EN TANT QU'AGONISTES DE CHOLECYSTOKININE SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kona; HOLLADAY, Mark, W ..; LIN, Chun, W.; NELLANS, Hugh, N. ABBOTT LABORATORIES English Patent DATE KIND NUMBER ______ WO 9119733 A1 19911226 AT BE CA CH DE DK ES FR GB GR IT JP LU NL SE WO 1991-US4458 A 19910620 19900620 US 1990-541,230 US 1991-713,010 19910614 PCTFULL COPYRIGHT 2006 Univentio on STN 1990006937 PCTFULL ED 20020513 DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS REPRODUISANT L'ACTIVITE DE LA CCK SHIOSAKI, Kazumi;

APPLICATION INFO.:

TITLE (ENGLISH):

PATENT ASSIGNEE(S):

LANGUAGE OF PUBL .:

DESIGNATED STATES

APPLICATION INFO.:

ACCESSION NUMBER:

TITLE (ENGLISH):

PATENT ASSIGNEE(S):

LANGUAGE OF PUBL.: DOCUMENT TYPE:

PATENT INFORMATION:

DESIGNATED STATES

APPLICATION INFO .:

ACCESSION NUMBER:

TITLE (ENGLISH):

TITLE (FRENCH):

INVENTOR(S):

ANSWER 5 OF 5

NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

W:

PRIORITY INFO.:

L36

TITLE (FRENCH):

INVENTOR(S):

PRIORITY INFO.:

L36

W:

DOCUMENT TYPE: PATENT INFORMATION:

TITLE (FRENCH):

INVENTOR(S):

ACCESSION NUMBER:

ANSWER 3 OF 5

PRIORITY INFO.:

ABBOTT LABORATORIES; PATENT ASSIGNEE(S):

SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE _____

WO 9006937 A1 19900628

DESIGNATED STATES

APPLICATION INFO .: PRIORITY INFO.:

W:

BE CH DE ES FR GB IT JP NL SE US WO 1989-US5673 A 19891218 US 1988-287,955 19881221

=> d ibib kwic 5

ANSWER 5 OF 5

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: TITLE (ENGLISH):

1990006937 PCTFULL ED 20020513 DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS

TITLE (FRENCH):

DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS

REPRODUISANT L'ACTIVITE DE LA CCK

INVENTOR(S):

SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

PATENT ASSIGNEE(S):

ABBOTT LABORATORIES; SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE ______

WO 9006937 A1 19900628

DESIGNATED STATES

W:

BE CH DE ES FR GB IT JP NL SE US WO 1989-US5673 A 19891218 19881221 US 1988-287,955

APPLICATION INFO .: PRIORITY INFO.:

DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS TIEN

DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS REPRODUISANT L'ACTIVITE TIFR

Tetrapeptide analogs are disclosed which possess CCK agonist ABEN activity.

Les analogues de tetrapeptides decrits possedent une activite similaire ABFR a la cholecystokinine (CCK).

DERTVATIVES OF-TETRAPEPTIDES AS CCK AGONISTS DETD This is a continuation-in-part of U.S. Patent Application Serial No. 287,955, filed December 21, 1988.

Technical Field

The present invention relates to novel organic compounds and compositions which mimic the effects of cholecystokinin, caerulein and gastrin, processes for making such compounds, synthetic intermediates employed in these processes and a method for treating gastrointestinal disorders, central nervous. .

Backaround of thp Tnvention

Cholecystokinin (CCK) is a 39 amino acid polypeptide hormone. CCK and a 33 amino acid fragment of CCK (CCK 33)

were first isolated from hog intestine (Mutt and jorpes, Biochem.]L, 12, Ij 628 (1981)). Recently the CCK 33 fragment has been found in the brain, where it appears to be the precursor of two smaller fragments, an octapeptide CC]K8 and a tetrapeptide CCK 4 (Dockray, Nature 264 402 (1979)).

Existence of these fragments in the cortex of the brain suggests that CCK may be an important neuromodulator of memory, learning and control of the primary sensory and motor functions. CCK and it-s fragments are believed to play an important role in appetite regulation and satiety (Della-Ferat Science 206 471 (1979); Saito et. . . Eating and it-s Disorders, eds.,

Raven Pressr New Yorkf 67 (1984)). Recently,, patients with bulimia were shown to have lower than normal CCK levels in their plasma-(Geracioti, et al., New England Journal of Medici=, 3_12 683 (1988)). An additional role for CCK in the periphery is to regulate the release of insulin., CCK has been shown to increase the levels of insulin when administered to mammals (Rushakoff, et al., J. Clin. Endocrinol, Metab. 65 395. . .

C-terminal fragments of CCK have recently been reported to function as CCK receptor antagonists (Jensen et al Biochem. Biophys. Acta, 757, 250 (1983); Spanarkel, J. Biol. Chem. ZUt 6746 (1983)). Japanese patent application 45/10506 to. . .

In contrast, the present invention relates to tetrapeptide analogs-which function as agonists of CCK activity, CCK agonists are useful in the treatment and prevention of CCK-related disorders of the gastrointestinal, appetite (obesity and bulimia, among others) and insulin regulatory systems of animals, especially man. CCK agonists are also useful as central nervous system suppressants which can exhibit antipsychotic, neuroleptic, anxiolytic, and anti-convulsant effects, among other effects on. . .

the Drawinas
Figure I is a plot comparing the mean level of liquid food intake (mls) for rats after chronic administration of vehicle, CCK-8 (10 nmol/kg), or the compound of Example 180 (1 nmol/kg or 10 nm/kg).

Figure 2 is a plot comparing the mean change in body weight (grams) for rats after chronic administration of vehicle, CCK-8 (10 nmol/kg), or the compound of Example 180 (1 nmol/kg or 10 nm/kg), Summary of the Invention In accordance with the present invention there are cholecystokinin agonists of the formula.

IL 1981, p 617) wherein the Boc or Cbz protected amino acid is treated with a base in the presence of a chelating agent such as a crown ether and then quenched with methyl iodide.

found: C 61.11r H 6.50F. N 10.89, The compounds of formula I are CCKagonists which are useful in the treatment and prevention of CCK-related disorders of the gastrointestinal, central nervous, and appetite and insulin regulatory systems of animals and humans. As CCK agonists, they are useful in the treatment and prevention of neuroleptic disorders, tardive dyskinesiat disorders of memory and cognition, Parkinson's disease, Huntington's chorea, . . .

The ability of the compounds of the invention to interact with CCK receptors and to act as CCK agonists can be demonstrated ja vitro using the following protocols.

CCK8 [Asp-Tyr(SO 3H)-Met-Gly-Trp-Met-Asp-Phe-NH2], bestatin and phosphoramidon were purchased from Peptide International (Louisville, KY), EGTAr HEPES and BSA were purchased from Sigma Chemical Co.

(St. Louis,, MO), 125 11 - Bolton-Hunter (BH-CCK (specific activity, 2200 Ci/mmol) was obtained from New England Nuclear (Boston, MA). Male guinea pigs, 250 to 32S g, were obtained from Scientific Small Animal Laboratory and Farm (Arlington Heights, IL). Collagenase, code CLSPA was purchased from Worthington (Frehold, New Jersey) Protocol For Radioligand Binding Experiments in Guinea Pig Cerebral Cortical and Pancreatic Membrane PreT) arations
Cortical and pancreatic membranes were prepared as described (Lin and Miller; J, Pharmacol,. . .

Incubation Conditions
1 125 I]Bolton-Hu-nter CCK and test compounds were
8
diluted with HEPES-EGTA-salt buffer (see above) containing
0.5% bovine serum albumin (BSA). To 1 mL Skatron
polystyrene tubes were added 25 uL of test compounds, 25 uL
of [125 IJBH-CCK and 200 uL of membrane suspension. The
8
final BSA concentration was 0.1%. The cortical tissues
were incubated at 300C for 150 min. . . . 37'C for 150 min.
Incubations were
terminated by filtration using Skatron Cell Harvester and
SS32 microfiber filter mats. The specific binding of
125
I IIBH-CCK 8. defined as the difference between
binding in
the absence and presence of 1 uM CCK., was 85-90% of total
binding in cortex and 90-95% in pancreas. IC 50 s were
determined from the Hill analysis. The results. . .

Table 1
125 1aaQ7'Q'L125
Compound of I-BH-CCK 8 I-BH-CCK8
Example Pancreas Cortex
30 270
12 680
10 732
26 238
71 1480
26 1800
32 114
45 35 4700
4 7 50 4 000
4 9 4 1 815

The results indicate that compounds of the invention possess selective affinity for the pancreatic CCK receptors.

Amylase Assay

are CCK agonists.

After the 30 min incubation time, the acini was resuspended in 100 volumes of KRH-BSA buffer, containing 3 uM phosphoramidon and 100 uM bestatin. While stirring, 400 uL of acini were added to 1.5 mL microcentrifuge tubes containing 50 uL of CCK., buffer, or test compounds. The final assay volume was 500 uL. Tubes were vortexed and placed in a 37'C waterbathf under 100%. . .

TABLE 2
Cgmipound of Example Amylase rele=r.---M.4aIIL
5
3
40
80
24
157 ill
180 0.74
The results indicate that compounds of the invention

Measurement of PlasMa Insulin in Mice Following Treatment With CCK or a CCK Aaonist Male mice, 20-30 g. were used in all experiments. The animals were fed with laboratory lab chow and water ad libitum. CCK8 or the CCK agonist compound of this invention was injected into the tail vein. Two minutes later, the animals were sacrificed and the blood was collected. . . 10,000 x g for 2 minutes. The insulin levels were determined in the supernatant, i,e,, plasma, by RIA using kits obtained from Radioassay Systems Laboratory (Carson, CA.) or Novo Biolabs (Danbury, CT.).

Agonists On Insulin Secretion in Nice % Increase In Insulin Dose Secretion versus Com-pound of Examr)le (nmole/kcr)]alinC Control 157 10 41 100 112 180 100 238 CCK8 3 65 10 85 30 90 100 70 The results indicate that compounds of the invention stimulate insulin secretion in yjy.Q.

CCK8 3.0 nmol/mouse 106 10.0 nmol/mouse 157 30.0 nmol/mouse 180 1.0 nmol/mouse The results of these tests indicate that compounds of the invention suppress locomotor activity. . food intake. Five minutes prior to their one hour free feeding (Purina Rat Chow), the animals were injected (i,p,) with either vehicle, CCK the compound of Example 106. The amount of food consumed was measured after subtraction of spillage. The results of this test are. AdMinistration of CCK Agonists Compound Dose Mean Food Intake vehicle ... 9,40 grams C-CK 20 ug/kg 6.56 grams Example 106 1,0 mg/kg 3.49 grams Example 106 3.0 mg/kg. When a compound of formula I is used as an agonist of CCK or gastrin in a human subject, the total daily dose administered in single or divided doses may be in amounts, for example,. 5 A method for mimicking the effects of CCK on CCK receptors comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of Claim 1, 7 A CCK agonist composition comprising a pharmaceutical carrier and a therapeutically effective amount of a compound of Claim 1. => s CCK and (DOTA or DTPA) 2003 CCK 36 CCKS 2007 CCK (CCK OR CCKS) 1767 DOTA 5 DOTAS 1768 DOTA (DOTA OR DOTAS) 5576 DTPA 12 DTPAS 5579 DTPA (DTPA OR DTPAS) 79 CCK AND (DOTA OR DTPA) => s 137 not py>1996935225 PY>1996 5 L37 NOT PY>1996 => d ibib kwic 1-5 COPYRIGHT 2006 Univentio on STN PCTFULL ANSWER 1 OF 5 1996005861 PCTFULL ED 20020514 ACCESSION NUMBER: COMPOSITIONS AND METHODS FOR THE TREATMENT OF BODY TITLE (ENGLISH): WEIGHT DISORDERS, INCLUDING OBESITY COMPOSITIONS ET PROCEDES DE TRAITEMENT DES TROUBLES TITLE (FRENCH): INHERENTS AU POIDS CORPOREL, DONT L'OBESITE TARTAGLIA, Louis, A.

L37

L38

L38

INVENTOR(S):

MILLENIUM PHARMACEUTICALS, INC. PATENT ASSIGNEE(S):

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE ______ WO 9605861 A1 19960229

DESIGNATED STATES

W:

AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT

SE

APPLICATION INFO.: PRIORITY INFO.:

A 19950823 WO 1995-US10918 19940823 US 1994-294,522 US 1995-470,868 19950606

DETD . . . These include but are not limited to the intracellular domain of receptors for such hormones as neuropeptide Y, galanin, interostatin, insulin, and CCK. Total genomic or cDNA sequences are fused to the DNA encoding an activation domain. This library and a plasmid encoding a hybrid of. . .

Eu, or others of the lanthanide series. These metals can be attached to the antibody using such metal chelating groups as diethylenetriaminepentacetic acid (DTPA) or ethylenediaminetetraacetic acid (EDTA).

ANSWER 2 OF 5 L38

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1995024426 PCTFULL ED 20020514

A NOVEL EXPRESSION-CLONING METHOD FOR IDENTIFYING TITLE (ENGLISH): TARGET PROTEINS FOR EUKARYOTIC TYROSINE KINASES AND

NOVEL TARGET PROTEINS

NOUVEAU PROCEDE D'EXPRESSION-CLONAGE UTILISE POUR TITLE (FRENCH):

IDENTIFIER DES PROTEINES A CIBLES DES TIROSINE-KINASES

EUKARYOTES, ET NOUVELLES PROTEINES CIBLES

INVENTOR(S):

SCHLESSINGER, Joseph; SKOLNIK, Edward, Y.; MARGOLIS, Benjamin, L. NEW YORK UNIVERSITY

PATENT ASSIGNEE(S):

English

LANGUAGE OF PUBL.: DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER KIND DATE ______ A1 19950914 WO 9524426

DESIGNATED STATES

W:

AM AU BB BG BR BY CA CN CZ EE FI GE HU JP KE KG KR KZ LK LR LT LV MD MG MN MW MX: NO NZ PL RO RU SD SG SI SK TJ TT UA UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR

NE SN TD TG

APPLICATION INFO .: PRIORITY INFO.:

A 19950313 WO 1995-US3385 19940311 US 1994-208,887

. . . lanthanide series. These metals can be attached to the peptide probe or anti-target protein antibody using such metal chelating groups as diethylenetriaminepentaacetic acid (DTPA) or ethylenediaminetetraacetic acid (EDTA).

know how to varv the aonrorrlate is parameters without undue ex-oerimentation. Furthermore, general methods in this area are set- forth in Sa:L=cck et al - (sunra) Materials of which solid phase carrier can be made include, but are not limited to, nitrocellulose,

cellulose, paner, substituted polystyrenes, acrylonitriles,. . .

ANSWER 3 OF 5 L38 ACCESSION NUMBER:

PCTFULL COPYRIGHT 2006 Univentio on STN

1995024225 PCTFULL ED 20020514

TITLE (ENGLISH): TITLE (FRENCH): INVENTOR(S):

POLYCHELANTS POLYCHELATEURS MARGERUM, Lawrence; CARVALHO, Joan; GARRITY, Martha;

FELLMANN, Jere, Douglas

NYCOMED SALUTAR, INC.; PATENT ASSIGNEE(S):

COCKBAIN, Julian, Roderick, Michaelson; MARGERUM, Lawrence;

CARVALHO, Joan; GARRITY, Martha;

FELLMANN, Jere, Douglas

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

KIND DATE NUMBER

A1 19950914 WO 9524225

DESIGNATED STATES

W:

AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK TJ TT UA UG US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

19940304

WO 1995-GB464 A 19950303

APPLICATION INFO .:

GB 1994-9404208.2

PRIORITY INFO.:

DETD

Thus, Krejcarek et al (supra) disclosed how polyaminopolycarboxylic acid (PAPCA) chelants, specifically DTPA (diethylenetriaminepentaacetic acid) could be conjugated to a protein, such as human serum albumin (HSA), by reaction of the triethylamine salt of the PAPCA.

Unger et al. in Investigative Radiology 20:693 (1985) analyzed tumor enhancement for magnetic resonance imaging using an anti-CEA monoclonal antibody conjugated with Gd-DTPA. They found no tumor enhancement when 4 Gd atoms were bound per antibody molecule, and predicted that a far greater ratio of.

Thus Hnatowich et al, (supra) used the cyclic anhydride of the chelant DTPA to attach it to a protein.

has thus been used to produce bifunctional polychelants in which the chelant moieties are residues of open chain PAPCAs, such as EDTA and DTPA, and in which the backbone molecule is a polyamine such as polylysine or polyethyleneimine.

Thus for example Manabe et al. in Biochemica et Biophysica Acta 883: 460-467 (1986) reported attaching up to 105 DTPA residues onto a poly-L-lysine backbone using the cyclic anhydride method and also attaching polylysine-polyDTPA polychelants onto monoclonal antibody (anti-HLA IgGj) using a 2-pyridyl disulphide linker achieving a substitution of up to about 42.5 chelants (DTPA resi]_-:-.-]s) per site-specific macromolecule. Torcrilin et al. in Hybridoma 6:229-240 (1987) also reported attaching DTPA and EDTA to

polyethyleneimine and polylysine backbones which were then attached to a myosin-specific monoclonal antibody, or its Fab fragment, to produce bifunctional polychelants. . .

chelant moieties in the polychelants of the invention may be residues of any of the conventional macrocyclic chelants such as for example DOTA, TETA, DO3A. etc, The macrocyclic skeleton, as mentioned above, preferably has 9 to 25 ring members and conveniently is an optionally oxygen or. . . pendent groups which participate in metal chelation, for example C1-6alkyl groups carrying hydroxyl, amino, phosphonate, or phosphinate or more preferably carboxyl groups. DO3A and DOTA derived macrocycles are especially preferred, i,e. groups of formula HOOC--\F-] X]--COOH HOOC--\F7 /-COOH
N N-] and [-N
EN N N N

Exemplary polyazacycloalkanepolycarboxylates include 1 7,10-tetraazacyclododecanetetraacetic acid (DOTA), 1,4,7,10-tetraazacyclododecane 4,7-triacetic acid (DO3A), 1-oxa-4,7,10-triazacyclododecanetriacetic acid (DOXA), 1,4,7-triazacyclononanetriacetic acid (NOTA) and 1 8,11-tetraazacyclotetradecanetetraacetic acid (TETA), Additionally, the novel tetraazacycloalkanepolycarboxylates, DOTA-N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide are also contemplated, The preparation of the tetraazacycloalkanepolycarboxylate ligands is well known. Synthesis of DOTA is described in U.S. Patent No. 4,647,447 (Gries et al.), U.S. Patent No, 4,639,365 (Sherry) and by Desreux et al.

in Inorg. Chem. 19:1319 (1980). Additionally, DOTA is available commercially from Parish Chemical Co,, Orem, UT, USA. Preparation of DO3A is described in EP-A-292689 (Squibb). Desreux, Inorg. Chem., 19:1319. . . al, Inorg. Chem, 26:3458 (1987) and Meares et al, Acc. Chem. Res., 17:202 (1984) describe the properties and chemistry of the macrocyclic ligands DOTA, NOTA, TETA and their backbone-derivatized analogues, including the preparation of NOTA and TETA.

U.S. Patent No, 4,678,667 (Meares et al.) teaches the preparation of a number of macrocyclic, side chain-derivatized ligands including DOTA and TETA.

Derivatization of DOTA to form DOTA
-N(2-aminoethyl)amide
and DOTA-N(4-aminophenethyl)amide is described in detail
hereinafter in Examples 2 and 3, respectively, The
above cited references and all other references
mentioned herein are hereby. . . .

be taken with the lanthanide ions to maintain the pH below 8 to avoid precipitation of the metal hydroxide. Metal incorporation into DOTA derived and related macrocylic chelant moieties will normally be a slow process, as described in the references cited below. Specific examples of the. . .

Med., 3:808 (1986) and WO-A-87/06229 describe

incorporation of Gd(III) into DOTA. A method of preparing Bi and Pb complexes of DOTA is described by Kumar et al, J. Chem. Soc. Chem. Commun., 3:145 (1989).

reduction of 99Tc with Sn in the presence of a weakly coordinating ligand such as glucoheptonate prior to complexation with chelants such as DOTA. These methods are well known in the radiopharmaceutical art 67CU utilizes tetraamine chelates such as tet A or tet B (see Bhardaredj. . .

CCK and hexapeptides), proteins (such as lectins, asialofetuin, polyclonal IgG, blood clotting proteins (e.g. hirudin), lipoproteins and glycoproteins), hormones, growth factors, and clotting factors. . .

In general, known methods can be used to join the macrocyclic chelants to backbone molecules. While for preferred macrocyclic chelants, such as DOTA, the conventional mixed anhydride and cyclic anhydride conjugation techniques are ineffective, it has been found that modifying the mixed anhydride procedure by reacting a polycarboxylic. . . .

For macrocycles with a pendant carboxylate, including but not limited to DOTA, TETA, TRITA (1,4,7,10-tetraazacyclotridecanetetraacetic acid) and NOTA, one of the carboxylates can form an entity which can react with a primary amine group. . .

linked to a backbone molecule through a non-coordinating primary amine group. Macrocyclic chelants having a non-coordinating primary amine group include primary amine side-chain-derivatized DOTA macrocycles, primary aminederivatized DO3A, and primary amine-derivatized hexaaza and octaaza macrocycles and macrobicycles (the HAMs.

for example, physiologically biocompatible buffers (as for example, tromethamine hydrochloride), additions (e,g,, 0.01 to 10 mole percent) of chelants (such as, for example, DTPA, DTPA

bisamide or non-complexed magnifier polychelant) or calcium chelate complexes (as for example calcium DTPA, CaNaDTPA-bisamide, calcium-magnifier polychelant or CaNa salts of magnifier polychelants), or, optionally, additions (e.g., 1 to 50 mole percent) of calcium or sodium salts (for. . .

L38 ANSWER 4 OF 5 ACCESSION NUMBER: TITLE (ENGLISH):

TITLE (FRENCH):

INVENTOR(S):

PATENT ASSIGNEE(S): DOCUMENT TYPE: PATENT INFORMATION: PCTFULL COPYRIGHT 2006 Univentio on STN 1995005842 PCTFULL ED 20020514 METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES DYSFONCTIONNEMENTS DES MUSCLES LISSES

PASRICHA, Pankaj, J.; KALLOO, Anthony, N.

THE JOHNS HOPKINS UNIVERSITY

Patent

NUMBER KIND DATE
----WO 9505842 A1 19950302

DESIGNATED STATES

W:

CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO.:

WO 1994-US9759 A 19940823

PRIORITY INFO.:

US 1993-112,088

19930826

Figs. 3A and B show the effect of intrasphincteric injection of BoTx on DETD LES response to cholecystokinin octapeptide (CCK)

response of the LES to the IV administration of edrophonium (Tensilon; ICN Pharmaceuticals Inc., Costa Mesa, CA) and cholecystokinin octapeptide (CCK-8) (Kinevac; ER Squibb amp; Sons, Princeton, NJ) in three

additional piglets was also measured. LES pressures, measured by a DENTSLEEVE, were recorded in response to IV edrophonium (5 mg). After a SUBSTITUTE SHEET (RULE 26)

washout period of 10 minutes, CCK (5 µ g IV) was then administered.

Subsequently, BoTx was injected into the LES, as described above, and the

experiment was. . .

Intrasphincteric BoTx also altered the response of the LES to

(Figure 3). In untreated piglets, CCK did not cause any significant change in

LES pressure. However, after intrasphincteric BoTx injection, a significant

increase in LES pressure was seen in response to CCK. It should be noted that

despite what was felt to be an adequate washout period (10 minutes) in between

injections, basal. . .

retention studies

After an overnight fast, patients were asked to ingest a corn-flake meal with milk containing 0.531 mci 99 aiTc DTPA. Subsequently, serial dynamic

images were obtained with the subject sitting erect in front of a gamma

Retention was expressed. . .

ANSWER 5 OF 5

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1993006868 PCTFULL ED 20020513

TITLE (ENGLISH):

DENDRIMERIC POLYCHELANTS

TITLE (FRENCH):

POLYCHELATEURS DENDRIMERES

INVENTOR(S):

WATSON, Alan, D.

PATENT ASSIGNEE(S):

COCKBAIN, Jilian, Roderick, Michaelson;

NYCOMED SALUTAR, INC.;

WATSON, Alan, D.

LANGUAGE OF PUBL.:

English

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER

KIND DATE ______

WO 9306868

A1 19930415

DESIGNATED STATES

AU BB BG BR CA CS FI HU JP KP KR LK MG MN MW NO PL RO RU SD US AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE

BF BJ CF CG CI CM GA GN ML MR SN TD TG

APPLICATION INFO.:

WO 1992-EP2308

A 19921006

PRIORITY INFO.:

US 1991-7/772,349

19911007

. . chelates which are useful in diagnostic imaging

and in radiotherapy and which comprise a plurality of macrocyclic

chelant moieties, e.g. DOTA

residues, conjugated to an up to fifth generation dendrimer backbone

DETD . . . paramagnetic metal ion chelates of bifunctional chelants for use as MRI contrast agents,
Thus, Krejcarek et al (supra) disclosed how polyaminopolycarboxylic acid (PAPCA) chelants, specifically DTPA (diethylepetriaminepentaacetic acid) could be conjugated to a protein, such as human serum albumin (HSA), by reaction of the triethylamine salt of the PAPCA. . .

cinquieme, par exemple un dendrimere en etoile..

152:571 (1988))e
Unger et al, in Investigative Radiology 20:693
(1985) analyzed tumor enhancement for magnetic resonance imaging using an anti-CEA monoclonal antibody conjugated with Gd-DTPA* They found no tumor enhancement when 4 Gd atoms were bound per antibody molecule, and predicted that a far greater ratio of. . .

Thus Hnatowich et al, (supra) used the cyclic anhydride of the chelant DTPA to attach it to a protein, This, is a relatively simple one-step synthesis procedure which as a result has been used by. . .

thus been used to produce bifunctional polychelants in which the chelant moieties are residues of open chain PAPCAs,, such as EDTA and DTPA,, and in which the backbone molecule is a polyamine such as polylysine or polyethyleneimine. Thus for example Manabe et al, in Biochemica. et Biophysica Acta 883: 460-467 (1986) reported attaching up to 105 DTPA residues onto a poly-L-lysine backbone using the cyclic anhydride method and also attaching polylysine-polyDTPA polychelants onto monoclonal antibody (anti-HLA IgGj) using a 2-pyridyl disulphide linker achieving a substitution of up to about 42,5 chelants (DTPA residues) per site-specific macromolecule. Torchlin et al. in Hybridoma 6:229-240 (1987) also reported attaching DTPA and EDTA to polyethyleneimine and polylysine backbones which:werethen attached to a myosin-specific monoclonal antibody, or its Fab fragment, to produce bifunctional polychelants.

diagnosis and therapy, due in part to their unique localization in the body, The monomeric chelates presently used for MRI contrast enhancement (e.g., Gd(DTPA)2-,, Gd(DOTA)'-) have in vivo applications related to their specific, rapid biodistribution, localizing these chelates in the extravascularl extracellular spaces of the body. The size.

Exemplary polyazacycloalkanepolycarboxylates include 1,4,7,10-tetraazacyclododecanetetraacetic acid (DOTA), 1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid (DO3A), I-oxa-4,7,10-triazacyclododecanetriacetic

ABFR .

has

acid (DOXA), 1.4,7-triazacyclononanetriacetic acid (NOTA) and 1.4,8,11-tetraazacyclotetradecanetetraacetic acid (TETA), Additionally, the novel - tetraazacycloalkanepolycarboxylates, DOTA-N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide are also contemplated.

The preparation of, the tetraazacycloalkanepolycarboxylate ligands is well known. Synthesis of DOTA is described in U.S. Patent No, 4,647,447 (Gries et al,), U.S, Patent No, 4,639,365 (Sherry) and by Desreux et al, in Inorg. Chem, .19:1319 (1980). Additionally, DOTA is available commercially from Parrish Chemical Co,, Orem, UT, USA. Preparation of DO3A is described in EP-A-292689 (Squibb). Desreux, Inorg. Chem,, 19:1319. . . et al, Inorg, Chem, 26:3458 (1987) and Meares et al, Acc, Chem, Res,, 17:202 (1984) describe theproperties and chemistry of the macrocyclic ligands DOTA, NOTA, TETA and their backbone-derivatized analogues, including the preparation of NOTA and TETA, U.S. Patent No. 4,678,667 (Meares et al,) teaches the preparation of a number of macrocyclic, side chainderivatized ligands including DOTA and TETA, Derivatization of DOTA to form DOTA -N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide is described in detail hereinafter in Examples 2 and 3, respectively. The above cited references and all other references mentioned herein are hereby.

acids, oligopeptides (e.g. hexapeptides), molecular recognition units (MRU's), single chain antibodies (SCA's), proteins, Fab fragments, and antibodies. Examples of site-directed molecules include polysaccharides (e,g, CCK and hexapeptides), proteins (such as lectins, asialofetuin, polyclonal IgG, blood clotting proteins (e.g. hirudin), lipoproteins and glycoproteins), hormones, growth factors, and clotting factors (such. . .

molecule

in general, known methods can be used to join the macrocyclic chelants to backbone molecules. While for preferred macrocyclic chelants, such as DOTA, the conventional mixed anhydride and cyclic anhydride conjugation techniques are ineffective, it has been found that modifying the mixed anhydride procedure by reacting a. . .

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linked to the

backbone polymer through a non-coordinating primary amine group. Macrocyclic chelants having a non-coordinating primary amine group include primary amine side-chain-derivatized DOTA macrocycles, primary amine-derivatized DO3A. and primary amine-derivatized hexaaza and octaaza. macrocycles and macrobicycles (the HAMsr sepulchrates and sarcophagines) as well as the. . .

Metal incorporation into DOTA derived and related

macrocylic chelant moieties will normally be a slow process, as described in the references cited below, Specific examples of the. . .

Ned,, 3:808 (1986) and WO-A-87/06229 describe incorporation of Gd(III) into DOTA, A method of preparing Bi and Pb complexes of DOTA is described by Kumar et alf J. Chem, Soc, Chem, Commun., 3:145 (1989) o The above references are incorporated herein by reference in their. . .

reduction of 99mTc with Sn in the presence of a weakly coordinating ligand such as glucoheptonate prior to complexation with chelants such as DOTA, These methods are well known in the radiopharmaceutical art. OCu utilizes tetraamine chelaltes such as tet A or tet B (see Bhardaredj. . .

for example, physiologically biocompatible buffers (as for example, tromethamine hydrochloride), additions (e.g., 0,01 to 10 mole percent) of chelants (such as, for example, DTPA, DTPA

bisamide or non-complexed magnifier polychelant) or calcium chelate complexes (as for example calcium DTPA, CaNaDTPA-bisamide, calcium-magn-ifier polychelant or CaNa salts of magnifier polychelants),, or, optionally, additions (e.g., I to 50 mole percent) of calcium or sodium salts (for. . .

EXAMPLE I

Preparation of DOTA Carboxycarbonic Anhydride DOTA(0*808 g-I 2,0 mmol) was suspended in 5.0 ml of anhydrous acetonitrile, Tetramethylguanidine (1e00 mli, 8.0 mmol) was added and the mixture stirred under an atmosphere of nitrogen for about 5 minutes at ambient temperature until the DOTA was dissolved, The resulting solution was cooled to -250C under an atmosphere of nitrogen and stirred while adding 0,260 ml (2,0 mmol).

The resulting slurry was stirred for I hour at -25 C4 EXAMPLE 2 Preparation of DOTA-N(2-aminoethV1)amide To the cold slurry from Example 1 was added a solution of mono-BOC-ethylenediamine (0,320g, 2mmol) in 2 ml acetonitrile and the mixture stirred. . . afforded 0.35g of a crystalline glass. IH NMR demonstrated the expected product, as well as some residual acetate (from chromatography), EXAMPLE 3 Preparation of DOTA-N(4-aminoDhenethvl)amide To the cold slurry from Example 1 is added a solution of 4-nitrophenethylamine (0,332g, 2mmol) in 4.0 ml acetonitrile, The mixture is stirred. . . and pH adjusted to 1015 with NaOH to form a mixture which is extracted with ethyl acetate to remove unreacted amine, The product, DOTA-N-(41-nitrophenethyl)amide, is isolated by ion exchange chromatography on DOWEX AGI-XS resin.

ceases to drop, The product is isolated by filtering off catalyst and evaporating the filtrate to dryness, EXAMPLE 4
Activation of Amino Group of DOTA-N(2-aminoethyl)amide

with Thiophosgene - Conversion to Isothiocyanate Groups An aqueous solution of the product prepared in Example 2 is added to an equal volume. . .

The procedure is repeated, substituting the product of Example 3 for the product of Example 2, EXAMPLE 5
Activation of Amino Group of DOTA-N(2-Aminoethyl) Amide with Bromoacetyl Chloride - Conversion to Bromoacetamide Grou'ps
An aqueous solution of the product prepared in Example 2 (20mg/ml) which also contains triethylamine

EXAMPLE 13

(20mg/ml) is.

Preparation of - PAMAM - Poly DOTA
The G2.0 PAMAM dendrimer prepared in Example 10 (log, 0.01 mol) is combined with 12 equivalents of DOTA carboxycarbonic anhydride (0,13 mol) prepared as in Example 1, by slowly mixing a precooled (00 C) acetonitrile solution (20 ml) of dendrimer to the DOTA mixed anhydride slurry over 10 minutes and gradually allowing the reaction mixture to warm to ambient temperature. The reaction mixture is worked up.

EXAMPLE 17
Preparation of DOTA-G3 Dendrimer magnifier
An acetonitrile solution of tris-t-butyl-DO3A and
ClCH2CONHCH2(C6H4)pNO2 (Example 16) are heated at 65DC for
24 hours, The chelant-linker product is isolated. . .

CLMEN. . . . compound according to any one of claims 1 to 13 wherein said macrocyclic chelants are selected from the residues of 1,4,7,10- tetraazacyclododecanetetraacetic acid (DOTA),

1 7,10-tetraazacyclododecane 4 triacetic acid (DO3A), I-oxa 7,10-triazacyclododecane-triacetic acid (DOXA), 1 7-triazacyclononanetriacetic acid (NOTA), 11408fll-tetraazacyclotetradecanetetraacetic acid (TETA), DOTA-N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide.

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                 CA/CAplus fields enhanced with simultaneous left and right
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                 truncation
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NEWS
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NEWS 11
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NEWS 12
         OCT 19
                 E-mail format enhanced
NEWS 13
                 Option to turn off MARPAT highlighting enhancements available
         OCT 23
NEWS 14
                 CAS Registry Number crossover limit increased to 300,000 in
NEWS 15
         OCT 23
                 multiple databases
                 The Derwent World Patents Index suite of databases on STN
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                 has been enhanced and reloaded
                 CHEMLIST enhanced with new search and display field
         OCT 30
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                 JAPIO enhanced with IPC 8 features and functionality
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                 CA/CAplus F-Term thesaurus enhanced
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         NOV 10
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         NOV 10
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                 8.01c now available
                 CA/CAplus pre-1967 chemical substance index entries enhanced
NEWS 21
         NOV 13
                 with preparation role
                 CAS Registry Number crossover limit increased to 300,000 in
         NOV 20
NEWS 22
                 additional databases
                 CA/CAplus to MARPAT accession number crossover limit increased
NEWS 23
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                 to 50,000
                 CA/CAplus patent kind codes will be updated
         NOV 20
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NEWS 25
         DEC 01
                 CAS REGISTRY chemical nomenclature enhanced
         DEC 11
NEWS 26
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
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NEWS X25
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     FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006
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L2
           424 S DYMGWMDF/SQSP
     FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006
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             0 S DPTA AND L3
L4
L5
             5 S DOTA AND L3
L6
        134722 S CHELAT?
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            12 S L6 AND L3
           . 0 S L7 NOT PY>1997
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             1 S L7 NOT PY>1998
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            49 S L10 AND L6
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            20 S L11 NOT PY>1996
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         14458 S METAL CHELAT?
L15
             3 S L14 AND L10
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           347 DPTA
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           347 DPTA
                (DPTA OR DPTAS)
          1203 DOTA
L16
            4 L10 AND (DPTA OR DOTA)
=> d ibib 1-4
L16 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:702005 CAPLUS
DOCUMENT NUMBER:
                        141:230668
                        Contrast enhanced x-ray phase imaging
TITLE:
                        Mattiuzzi, Marco; Arfelli, Fulvia; Menk, Ralf-Hendrik;
INVENTOR(S):
                        Rigon, Luigi; Besch, Hans-Juergen
PATENT ASSIGNEE(S):
                       Bracco Imaging S.P.A., Italy
                        PCT Int. Appl., 38 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                               DATE
                                          APPLICATION NO.
     PATENT NO.
                        KIND
                              20040826 WO 2004-EP1213
                                                                 -----
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                        A1
                                                                20040210
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
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GQ, GW, ML, MR, NE, SN, TD, TG

EP 1592456 Α1 20051109 EP 2004-709594 20040210 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ; EE, HU, SK JP 2006517558 20060727 JP 2006-501789 Т2 20040210 P 20030213 PRIORITY APPLN. INFO .: US 2003-446986P

L16 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

2001:43075 CAPLUS ACCESSION NUMBER:

135:118839 DOCUMENT NUMBER:

Use of the rat pancreatic CA20948 cell line for the TITLE:

comparison of radiolabelled peptides for

receptor-targeted scintigraphy and radionuclide

therapy

Bernard, B. F.; Krenning, E.; Breeman, W. A. P.; AUTHOR(S):

Visser, T. J.; Bakker, W. H.; Srinivasan, A.; De Jong,

WO 2004-EP1213

W 20040210

Departments of Nuclear Medicine, University Hospital CORPORATE SOURCE:

Dijkzigt, Rotterdam, 3015 GD, Neth.

SOURCE: Nuclear Medicine Communications (2000), 21(11),

1079-1085

CODEN: NMCODC; ISSN: 0143-3636 Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal LANGUAGE: English

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 31

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:271563 CAPLUS

DOCUMENT NUMBER: 129:119669

Unsulfated DTPA- and DOTA-CCK analogs as TITLE:

specific high-affinity ligands for CCK-B

receptor-expressing human and rat tissues in vitro and

AUTHOR(S): Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.;

Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.

Institute of Pathology, Division of Cell Biology and CORPORATE SOURCE:

Experimental Cancer Research, University of Berne,

Switz.

European Journal of Nuclear Medicine (1998), 25(5), SOURCE:

481-490

CODEN: EJNMD9; ISSN: 0340-6997

PUBLISHER:

Springer-Verlag

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:594650 CAPLUS

DOCUMENT NUMBER:

127:259530

TITLE:

SOURCE:

Use of labeled CCK-B receptor ligands for the

detection, localization, and treatment of malignant

human tumors

INVENTOR(S):

Reubi, Jean-Claude

PATENT ASSIGNEE(S):

Mallinckrodt Medical, Inc., USA; Reubi, Jean-Claude

PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

. English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | | |
|---|--------|----------------------|--|--------------------------------------|--|--|--|
| | · A2 | 19970904 19971023 | WO 1997-US3056 | 19970225 | | | |
| | | | , GB, GR, IE, IT, CA 1997-2247430 | LU, MC, NL, PT, SE | | | |
| EP 885017 ' | A2 | 19981223 | EP 1997-908751 , GR, IT, LI, LU, | 19970225 | | | |
| 0. 2 | T2 | 20000523 | JP 1997-531108 | 19970225 | | | |
| US 2004185510 PRIORITY APPLN. INFO.: | A1 | 20040923 | US 2003-626229 EP 1996-200498 WO 1997-US3056 | 20030724 A 19960227 W 19970225 | | | |
| OTHER SOURCE(S): | MARPAT | 127:259530 | US 1999-125823 | B1 19990119 | | | |
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(DTPA OR DTPAS)

L17 9 L10 AND DTPA

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L17 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:424231 CAPLUS

DOCUMENT NUMBER:

141:271813

TITLE:

Synthesis and characterization of a sulfated and a non-sulfated cyclic CCK8 analogue functionalized with

a chelating group for metal labelling

AUTHOR(S):

De Luca, Stefania; Morelli, Giancarlo

CORPORATE SOURCE: Centro Interuniversitario per la Ricerca sui Peptidi

Bioattivi (CIRPeB) and Dipartimento di Chimica

Biologica, Universita di Napoli "Federico II", Naples,

80134, Italy

SOURCE:

Journal of Peptide Science (2004), 10(5), 265-273

CODEN: JPSIEI; ISSN: 1075-2617

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 13 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:254192 CAPLUS

DOCUMENT NUMBER:

142:62411

TITLE:

In Vitro and In Vivo Characterization of Indium-111 and Technetium-99m Labeled CCK-8 Derivatives for CCK-B

Receptor Imaging

AUTHOR(S):

Aloj, L.; Panico, M.; Caraco, C.; Del Vecchio, S.; Arra, C.; Affuso, A.; Accardo, A.; Mansi, R.; Tesauro, D.; De Luca, S.; Pedone, C.; Visentin, R.; Mazzi, U.;

Morelli, G.; Salvatore, M.

CORPORATE SOURCE:

Istituto di Biostrutture e Bioimmagini, CNR, Naples,

Italy

SOURCE:

Cancer Biotherapy & Radiopharmaceuticals (2004),

19(1), 93-98

CODEN: CBRAFJ; ISSN: 1084-9785

PUBLISHER:

Mary Ann Liebert, Inc.

DOCUMENT TYPE:

Journal English

LANGUAGE: REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L17 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN 2003:133309 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 138:197782 Peptides conjugates, their derivatives with metal TITLE: complexes and use thereof for magnetic resonance imaging (MRI) Aime, Silvio; Gianolio, Eliana; Morelli, Giancarlo; INVENTOR(S): Pedone, Carlo; Tesauro, Diego; Lattuada, Luciano; Visigalli, Massimo; Anelli, Pier Lucio Bracco Imaging S.P.A., Italy PATENT ASSIGNEE(S): PCT Int. Appl., 44 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE **---**_____ ______ WO 2002-EP8382 20020726 20030220 A2 WO 2003014157 А3 20031113 . WO 2003014157 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW. RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2002328981 20030224 AU 2002-328981 20020726 Α1 20020726 20040428 EP 2002-764797 EP 1412383 A2 EP 1412383 В1 20061115 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK JP 2003-519106 20020726 Τ2 20050421 JP 2005510461 Α1 20050113 US 2004-485847 20040902 US 2005008573 A 20010803 IT 2001-MI1708 PRIORITY APPLN. INFO.: W 20020726 WO 2002-EP8382 OTHER SOURCE(S): MARPAT 138:197782 L17 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN 2001:609701 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 136:321340 New radiolabeled CCK-8 analogues [Tc-99m-GH-CCK-8 and TITLE: Tc-99m-DTPA-CCK-8]: preparation and biodistribution studies in rats and rabbits AUTHOR(S): Ertay, T.; Unak, P.; Bekis, R.; Yurt, F.; Biber, F. Z.; Durak, H. Dept. of Nuclear Medicine, Dokuz Eylul University, CORPORATE SOURCE: Medical School, Inciralti, Izmir, Turk. Nuclear Medicine and Biology (2001), 28(6), 667-678 SOURCE: CODEN: NMBIEO; ISSN: 0969-8051 PUBLISHER: Elsevier Science Inc.

L17 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN 1999:402924 CAPLUS ACCESSION NUMBER:

32

Journal

English

131:225550 DOCUMENT NUMBER:

DOCUMENT TYPE:

REFERENCE COUNT:

LANGUAGE:

Radiolabeled peptides for targeting TITLE:

cholecystokinin-B/gastrin receptor-expressing tumors

Behr, Thomas M.; Jenner, Niels; Behe, Martin; AUTHOR(S):

Angerstein, Christa; Gratz, Stefan; Raue, Friedhelm;

Becker, Wolfgang

Department of Nuclear Medicine, Georg-August-CORPORATE SOURCE:

University, Gottingen, D-37075, Germany

SOURCE: Journal of Nuclear Medicine (1999), 40(6), 1029-1044

> CODEN: JNMEAQ; ISSN: 0161-5505 Society of Nuclear Medicine, Inc.

PUBLISHER: DOCUMENT TYPE: Journal

English LANGUAGE:

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:396519 CAPLUS

DOCUMENT NUMBER: 131:200015

TITLE: Tri-t-butyl-DTPA: a versatile synthon for

the preparation of DTPA-containing peptides

by solid phase

Srinivasan, Ananth; Schmidt, Michelle A. AUTHOR(S):

Mallinckrodt Inc., Hazelwood, MO, 63042, USA CORPORATE SOURCE:

SOURCE: Peptides: Frontiers of Peptide Science, Proceedings of

the American Peptide Symposium, 15th, Nashville, June

14-19, 1997 (1999), Meeting Date 1997, 267-268. Editor(s): Tam, James P.; Kaumaya, Pravin T. P.

Kluwer: Dordrecht, Neth.

CODEN: 67UCAR Conference

DOCUMENT TYPE: LANGUAGE: English

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

1998:271563 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 129:119669

Unsulfated DTPA- and DOTA-CCK analogs as TITLE:

specific high-affinity ligands for CCK-B

receptor-expressing human and rat tissues in vitro and

AUTHOR(S): Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.;

Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.

Institute of Pathology, Division of Cell Biology and CORPORATE SOURCE:

Experimental Cancer Research, University of Berne,

Switz.

European Journal of Nuclear Medicine (1998), 25(5), SOURCE:

481-490

CODEN: EJNMD9; ISSN: 0340-6997

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 26

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

1997:594650 CAPLUS ACCESSION NUMBER:

127:259530 DOCUMENT NUMBER:

Use of labeled CCK-B receptor ligands for the TITLE:

detection, localization, and treatment of malignant

human tumors

Reubi, Jean-Claude INVENTOR(S):

Mallinckrodt Medical, Inc., USA; Reubi, Jean-Claude PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 61 pp. Enter NEWS followed by the item number or name to see news on that specific topic.

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L4 0 DPTA AND L3

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1203 DOTA

L5 5 DOTA AND L3

=> d ibib 1-5

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:240598 CAPLUS

DOCUMENT NUMBER:

136:272268

TITLE:

Prochelators for the preparation of radiometal labeled

molecules having improved biological properties

INVENTOR(S):

Maecke, Helmut R.; Eisenwiener, Klaus; Powell, Pia

PATENT ASSIGNEE(S):

Mallinckrodt, Inc., USA PCT Int. Appl., 21 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | | |
|----------------------------|------------------|------------------------------|--|----------------------------|--|--|--|
| WO 2002024235 | A2 | 20020328 | WO 2001-EP5483 | 20010511 | | | |
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RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
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                                             JP 2002-528305
                                                                     20010511
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                                 20050116
     ES 2221903
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                                                                  A 20000512
                                             EP 2000-110084
PRIORITY APPLN. INFO.:
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OTHER SOURCE(S):
     ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
                         2000:619258 CAPLUS
ACCESSION NUMBER:
                          133:350200
DOCUMENT NUMBER:
                          A convenient synthesis of novel bifunctional
TITLE:
                          prochelators for coupling to bioactive peptides for
                          radiometal labelling
                          Eisenwiener, K.-P.; Powell, P.; Macke, H. R.
AUTHOR(S):
                          Department of Radiology, Institute of Nuclear
CORPORATE SOURCE:
                          Medicine, Division of Radiological Chemistry,
                          University Hospital, Basel, CH-4031, Switz.
                          Bioorganic & Medicinal Chemistry Letters (2000),
SOURCE:
                          10(18), 2133-2135
                          CODEN: BMCLE8; ISSN: 0960-894X
                          Elsevier Science Ltd.
PUBLISHER:
                          Journal
DOCUMENT TYPE:
                          English
LANGUAGE:
                          CASREACT 133:350200
OTHER SOURCE(S):
                                THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
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     ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          2000:44679 CAPLUS
DOCUMENT NUMBER:
                          132:319291
                          Preclinical and initial clinical evaluation of
TITLE:
                          111In-labeled nonsulfated CCK8 analog: A peptide for
                          CCK-B receptor-targeted scintigraphy and radionuclide
                          De Jong, Marion; Bakker, Willem H.; Bernard, Bert F.;
AUTHOR(S):
                          Valkema, Roelf; Kwekkeboom, Dik J.; Reubi,
                          Jean-Claude; Srinivasan, Ananth; Schmidt, Michelle;
                          Krenning, Eric P.
                          Department of Nuclear Medicine, University Hospital
CORPORATE SOURCE:
                          Dijkzigt, Rotterdam, 3015 GD, Neth.
                          Journal of Nuclear Medicine (1999), 40(12), 2081-2087
SOURCE:
                          CODEN: JNMEAQ; ISSN: 0161-5505
                          Society of Nuclear Medicine, Inc.
PUBLISHER:
DOCUMENT TYPE:
                          Journal
                          English
LANGUAGE:
                                THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
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REFERENCE COUNT:
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     ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
                          1998:271563 CAPLUS
ACCESSION NUMBER:
                          129:119669
DOCUMENT NUMBER:
                          Unsulfated DTPA- and DOTA-CCK analogs as
TITLE:
```

specific high-affinity ligands for CCK-B

receptor-expressing human and rat tissues in vitro and

in vivo

Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.; AUTHOR(S):

Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.

Institute of Pathology, Division of Cell Biology and CORPORATE SOURCE:

Experimental Cancer Research, University of Berne,

Switz.

European Journal of Nuclear Medicine (1998), 25(5), SOURCE:

481-490

CODEN: EJNMD9; ISSN: 0340-6997

Springer-Verlag PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26 REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

1997:594650 CAPLUS ACCESSION NUMBER:

127:259530 DOCUMENT NUMBER:

Use of labeled CCK-B receptor ligands for the TITLE:

detection, localization, and treatment of malignant

human tumors

Reubi, Jean-Claude INVENTOR(S):

Mallinckrodt Medical, Inc., USA; Reubi, Jean-Claude PATENT ASSIGNEE(S):

PCT Int. Appl., 61 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND DATE | | APPLICATION NO. | DATE | | | | |
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| WO 9731657 WO 9731657 | A2 A3 | 19970904 19971023 | WO 1997-US3056 | 19970225 | | | | |
| W: CA, JP, US RW: AT, BE, CH, CA 2247430 EP 885017 | AA A2 | 19970904 19981223 | EP 1997-908751 | 19970225 19970225 | | | | |
| R: AT, BE, CH, IE, FI | DE, DK | , ES, FR, | GB, GR, IT, LI, LU, | NL, SE, MC, PI, | | | | |
| JP 2000506141 US 2004185510 | T2 A1 | 20000523 20040923 | | 19970225 20030724 | | | | |
| PRIORITY APPLN. INFO.: | | | EP 1996-200498 WO 1997-US3056 US 1999-125823 | A 19960227 W 19970225 B1 19990119 | | | | |

MARPAT 127:259530 OTHER SOURCE(S):

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134722 CHELAT? 1.6

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FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006

136 S DY'NLE'GW'NLE'DF/SQSP L1

424 S DYMGWMDF/SQSP L2

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     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
                         1998:271563 CAPLUS
ACCESSION NUMBER:
                         129:119669
DOCUMENT NUMBER:
                         Unsulfated DTPA- and DOTA-CCK analogs as specific
TITLE:
                         high-affinity ligands for CCK-B receptor-expressing
                         human and rat tissues in vitro and in vivo
                          Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.;
AUTHOR(S):
                          Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.
                          Institute of Pathology, Division of Cell Biology and
CORPORATE SOURCE:
                          Experimental Cancer Research, University of Berne,
                          Switz.
                          European Journal of Nuclear Medicine (1998), 25(5),
SOURCE:
                          481-490
                          CODEN: EJNMD9; ISSN: 0340-6997
                          Springer-Verlag
PUBLISHER:
                          Journal
DOCUMENT TYPE:
                          English
LANGUAGE:
                                THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS
                          26
REFERENCE COUNT:
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> d his
     (FILE 'HOME' ENTERED AT 13:35:48 ON 07 DEC 2006)
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L1
            424 S DYMGWMDF/SQSP
L2
     FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006
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L9
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=> s 111 not py>1996

9844902 PY>1996

L13 20 L11 NOT PY>1996

=> d ibib 1-4

L13 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

1996:395151 CAPLUS ACCESSION NUMBER:

125:133249 DOCUMENT NUMBER:

The excitatory effect of cholecystokinin on rat TITLE: neostriatal neurons: ionic and molecular mechanisms

Wu, Tony; Wang, Hung-Li AUTHOR(S):

Department of Neurology, Chang Gung Memorial Hospital, CORPORATE SOURCE:

Kwei-San, Tao-Yuan, Taiwan

European Journal of Pharmacology (1996), 307(2), SOURCE:

125-132

CODEN: EJPHAZ; ISSN: 0014-2999

Elsevier PUBLISHER: Journal DOCUMENT TYPE: English LANGUAGE:

L13 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

1995:862980 CAPLUS ACCESSION NUMBER:

123:247490 DOCUMENT NUMBER:

Nitric oxide modulates pepsinogen secretion induced by TITLE:

calcium-mediated agonist in guinea pig gastric chief

cells

Fiorucci, Stefano; Distrutti, Eleonora; Chiorean, AUTHOR(S):

Mihnea; Santucci, Luca; Belia, Silvia; Fano, Giorgio;

De Giorgio, Roberto; Stanghellini, Vincenzo;

Corinaldesi, Roberto; Morelli, Antonio

Dipartimento di Medicina Clinica, Univ. degli Studi di CORPORATE SOURCE:

Perugia, Perugia, Italy

Gastroenterology (1995), 109(4), 1214-23 SOURCE:

CODEN: GASTAB; ISSN: 0016-5085

Saunders PUBLISHER: Journal DOCUMENT TYPE: English LANGUAGE:

L13 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

1995:636142 CAPLUS ACCESSION NUMBER:

123:26032 DOCUMENT NUMBER:

Potentiation of cholecystokinin-induced amylase TITLE:

release by peptide VIP in guinea pig pancreatic acini

Tanaka, Keiko; Shibuya, Izumi; Kanno, Tomio AUTHOR(S):

Faculty Veterinary Medicine, Hokkaido University, CORPORATE SOURCE:

Sapporo, 060, Japan

Japanese Journal of Physiology (1995), 45(2), 241-56 SOURCE:

CODEN: JJPHAM; ISSN: 0021-521X

Business Center for Academic Societies Japan PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

CAPLUS COPYRIGHT 2006 ACS on STN L13 ANSWER 4 OF 20

1995:540954 CAPLUS ACCESSION NUMBER:

122:282413 DOCUMENT NUMBER:

Highly sensitive non-isotopic immunoassays for TITLE: cholecystokinin using various detection methods

Ito, Katsutoshi; Kodama, Ryoko; Maeda, Masako; Tsuji,

AUTHOR(S):

Akio

Sch. Pharmaceutical Sci., Showa Univ., Tokyo, 142, CORPORATE SOURCE:

Analytical Letters (1995), 28(5), 797-807 SOURCE:

CODEN: ANALBP; ISSN: 0003-2719

Dekker PUBLISHER: Journal DOCUMENT TYPE:

LANGUAGE:

CORPORATE SOURCE:

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=> d kwic
L13 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN
          . currents. Internal administration of heparin (2 mg/mL), an
     inositol 1,4,5-trisphosphate (IP3) receptor antagonist, and buffering of
     intracellular calcium with the Ca2+-chelator, BAPTA
     (1,2-bis(2-aminophenoxy)ethane-N,N,N',N'-tetraacetic acid, 10 mM),
     suppressed CCK-8-evoked cationic currents. These findings suggest that,
     by activating CCKB receptors, CCK-8 excites rat.
     1947-37-1 25126-32-3, Cholecystokinin-8 (pig)
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (ionic and mol. mechanisms of excitatory effect of cholecystokinin on
        rat neostriatal neurons)
=> s metal chelat?
       1697487 METAL
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        134722 CHELAT?
         14458 METAL CHELAT?
L14
                 (METAL (W) CHELAT?)
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=> s 114 and 110
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L15 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
                         1998:271563 CAPLUS
ACCESSION NUMBER:
                         129:119669
DOCUMENT NUMBER:
                         Unsulfated DTPA- and DOTA-CCK analogs as specific
TITLE:
                         high-affinity ligands for CCK-B receptor-expressing
                         human and rat tissues in vitro and in vivo
                         Reubi, J. C.; Waser, B.; Schaer, J. C.; Laederach, U.;
AUTHOR(S):
                         Erion, J.; Srinivasan, A.; Schmidt, M. A.; Bugaj, J.
```

Institute of Pathology, Division of Cell Biology and

Experimental Cancer Research, University of Berne,

Switz.

European Journal of Nuclear Medicine (1998), 25(5), SOURCE:

481-490

CODEN: EJNMD9; ISSN: 0340-6997

PUBLISHER:

Springer-Verlag

DOCUMENT TYPE:

Journal

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1993:163822 CAPLUS

DOCUMENT NUMBER:

118:163822

TITLE:

Rat kidney endopeptidase 24.16. Purification, physicochemical characteristics and differential specificity towards opiates, tachykinins and

neurotensin-related peptides

AUTHOR(S):

Barelli, Helene; Vincent, Jean Pierre; Checler,

Frederic

CORPORATE SOURCE:

Inst. Pharmacol. Mol. Cell., Univ. Nice Sophia

Antipolis, Valbonne, Fr.

SOURCE:

European Journal of Biochemistry (1993), 211(1-2),

79-90

English

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE:

LANGUAGE:

Journal

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1981:419815 CAPLUS

DOCUMENT NUMBER:

95:19815

TITLE:

Degradation of cholecystokinin-like peptides by a crude rat brain synaptosomal fraction: a study by

high pressure liquid chromatography

AUTHOR(S):

Deschodt-Lanckman, Monique; Bui, Ngoc Diem; Noyer,

Michel; Christophe, Jean

CORPORATE SOURCE:

Med. Sch., Univ. Libre Bruxelles, Brussels, B-1000,

Belg.

SOURCE:

Regulatory Peptides (1981), 2(1), 15-30

CODEN: REPPDY; ISSN: 0167-0115

DOCUMENT TYPE:

LANGUAGE:

Journal English

=> d ibib kwic 2-3

L15 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1993:163822 CAPLUS

DOCUMENT NUMBER:

118:163822

TITLE:

Rat kidney endopeptidase 24.16. Purification, physicochemical characteristics and differential specificity towards opiates, tachykinins and

neurotensin-related peptides

AUTHOR(S):

Barelli, Helene; Vincent, Jean Pierre; Checler,

Frederic

CORPORATE SOURCE:

Inst. Pharmacol. Mol. Cell., Univ. Nice Sophia

Antipolis, Valbonne, Fr.

SOURCE:

European Journal of Biochemistry (1993), 211(1-2),

79-90

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Endopeptidase 24.16 was purified from rat kidney homogenate on the basis of its ability to generate the biol. inactive degradation products neurotensin (1-10) and neurotensin (11-13). On SDS gels of the proteins pooled after

the last purification step, the enzyme appeared homogeneous and behaved as a 70-kDa monomer. The peptidase was not sensitive to specific inhibitors of aminopeptidases, pyroglutamyl aminopeptidase I, endopeptidase 24.11, endopeptidase 24.15, proline endopeptidase and angiotensin-converting enzyme but was potently inhibited by several metal chelators such as o-phenanthroline and EDTA and was blocked by divalent cations. The specificity of endopeptidase 24.16 towards peptides of the tachykinin, opioid and neurotensin families was examined by competition expts. of tritiated neurotensin hydrolysis as well as HPLC anal. These results indicated that endopeptidase 24.16 could discriminate between peptides belonging to the same family. Neurotensin, Lys8-Asn9-neurotensin(8-13) and xenopsin were efficiently hydrolyzed while neuromedin N and kinetensin underwent little if any proteolysis by the peptidase. Analogously, substance P and dynorphins (1-7) and (1-8) were readily proteolyzed by endopeptidase 24.16 while neurokinin A, amphibian tachykinins and leucine or methionine enkephalins totally resisted degradation By Triton X-114 phase separation, 15-20% of endopeptidase 24.16 partitioned in the detergent phase, indicating that renal endopeptidase 24.16 might exist in a genuine membrane-bound form. The equipotent solubilization of the enzyme by 7 detergents of various critical micellar concns. confirmed the occurrence of a membrane-bound counterpart of endopeptidase 24.16. Furthermore, the absence of release elicited by phosphatidylinositolspecific phospholipase C suggested that the enzyme was not attached by a glycosyl-phosphatidylinositol anchor in the membrane of renal microvilli. Finally, endopeptidase 24.16 could not be released from these membranes upon trypsinolysis.

TT 50-56-6, Oxytocin, biological studies 69-25-0, Eledoisin 113-79-1, [Arg8]vasopressin 2507-24-6, Physalaemin 9034-40-6, LHRH 24305-27-9, TRH 25126-32-3 31362-50-2, Bombesin 33507-63-0, Substance P 37213-49-3, α-Melanotropin 63968-82-1, Kassinin 86933-74-6, Neurokinin A 86933-75-7

RL: BIOL (Biological study)

(endopeptidase 24.16 of kidney microvillus specificity for)

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:419815 CAPLUS

DOCUMENT NUMBER: 95:19815

TITLE: Degradation of cholecystokinin-like peptides by a

crude rat brain synaptosomal fraction: a study by

high pressure liquid chromatography

AUTHOR(S): Deschodt-Lanckman, Monique; Bui, Ngoc Diem; Noyer,

Michel; Christophe, Jean

CORPORATE SOURCE: Med. Sch., Univ. Libre Bruxelles, Brussels, B-1000,

Bela.

SOURCE: Regulatory Peptides (1981), 2(1), 15-30

CODEN: REPPDY; ISSN: 0167-0115

DOCUMENT TYPE: Journal LANGUAGE: English

Degradation of cholecystokinin-8 (CK-8), CCK-4, and related peptides by a crude synaptosomal fraction of rat brain was investigated by monitoring the tryptophan fluorescence of reaction products after HPLC fractionation. At 20° , the half disappearance time was 52 min for CCK-8, 35 min for unsulfated CCK-8, 20 min for unsulfated CCK-7, 6 min for Tyr(SO3H)-Trp-Met-Asp-Phe-NH2, and 3 min only for CCK-4. Caerulein was much more resistant than CCK-8, and Boc-CCK-4 (where Boc = tert-butoxycarbonyl) and Aoc-CCK-4 (where Aoc = tert-amyloxycarbonyl) remained stable for ≥3 h. The apparent Km for CCK-8 and CCK-4 was 40 μM and maximal activity on CCK-8 was observed at pH 7.0. Zn2+ was strongly inhibitory. The protease inhibitors puromycin and bacitracin, the metal chelator 1,10-phenanthroline, and the SH blocking agents N-ethylmaleimide and p-chloromerlcuribenzoate greatly reduced the release of tryptophan from CCK-8. Puromycin inhibition of CCK-8 degradation provoked the accumulation of a CCK-7-like peptide, and that of CCK-4 degradation was of a competitive type (Ki = 2 μ M). The CCK-8-degrading activity of brain synaptosomes was present in the cytosol

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | | | | | | | A | DATE | | | | | | | | | | |
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| WO 9731657 | | 19970904 | | WO 1997-US3056 | | | 19970225 | | | | | | | | | | | |
| | WO | 9731 | 657 | | | A3 | | 1997 | 1023 | | | | | | | | | |
| | | W: | CA, | JP, | US | | | | | | | | | | | | | |
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| | CA | 2247 | 430 | | | AA | | 1997 | 0904 | C. | A 1997 | -2247 | 430 | | 1 | 9970: | 225 | |
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| JP 2000506141 | | | | Т2 | | 2000 | 0523 | J | P 1997 | -5311 | 80 | | 1 | 9970: | 225 | | | |
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| PF | RIORIT | Y APP | LN. | INFO | . : | | | | | Ε | P 1996 | -2004 | 98 | 7 | A 1 | 9960 | 227 | |
| | | | | | | | | | | W |) 1997· | -US30 | 56 | 1 | W 1 | 9970 | 225 | |
| | | | | | | | | | | U | S 1999 | -1258 | 23 |] | B1 1 | 9990 | 119 | |

MARPAT 127:259530 OTHER SOURCE(S):

L17 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:69756 CAPLUS

DOCUMENT NUMBER:

110:69756

TITLE:

Effects of cholecystokinin-octapeptide (CCK-8) on food

intake and gastric emptying in man

AUTHOR(S):

Muurahainen, Norma; Kissileff, Harry R.; Derogatis,

Andrew J.; Xavier Pi Sunyer, F.

CORPORATE SOURCE:

Coll. Physicians Surg., Columbia Univ., New York, NY,

10025, USA

SOURCE:

Physiology & Behavior (1988), 44(4-5), 645-9

CODEN: PHBHA4; ISSN: 0031-9384

DOCUMENT TYPE:

LANGUAGE:

Journal English

=> d kwic 9

L17 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

. . infusions of CCK-8 and saline on sep. nonconsecutive days after AΒ they had consumed 500 g of tomato soup tagged with technetium-99-DTPA. Intake of a test meal was measured 20 min after consumption of the soup whereas gastric emptying was simultaneously monitored.

25126-32-3 ΙT

RL: BIOL (Biological study)

(appetite and stomach emptying response to, in man)

=> file dissab

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 69.02 128.33

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INFLUENCIA DE LA COLECISTOKININA ENDOGENA EN EL VACIAMIENTO GASTRICO Y EN LA SECRECION POSPRANDIAL DE INSULINA EN EL

HOMBRE

AUTHOR: HIDA

HIDALGO GRAU, LUIS ANTONIO

CORPORATE SOURCE:

UNIVERSITAT AUTONOMA DE BARCELONA (SPAIN) (5852)

SOURCE:

Dissertation Abstracts International, (1993) Vol. 56, No. 1C, p. 157. Order No.: AARC391489 (not available for sale by UMI). SERVEI DE PUBLICACIONS DE LA UNIVERSITAT AUTONOMA DE BARCELONA, EDIFICI RECTORAT, APARTAT POSTAL 20, E-08193

BELLATERRA (BARCELONA), SPAIN.

ISBN: 84-7929-812-X.

DOCUMENT TYPE:

Dissertation .

FILE SEGMENT:

DAI

LANGUAGE:

Spanish

ENTRY DATE:

Entered STN: 19950321

INI DATE: Efficied SIN. 19930321

Last Updated on STN: 19950321

=> d kwic 1-2

L20 ANSWER 1 OF 2 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

AB . . . of radioisotopes for physiological studies. Their use for the labelling of small compounds such as drugs has not been reported.

Cholecystokinin (CCK) is a hormone whose actions have been associated with satiety, and whose levels have been found to be abnormal.

. . \$\sp{111}\\$In or \$\rm \sp{99m}\\$Tc using polyaminopolycarboxylic acid

chelators is reported. The synthesis of disubstituted as opposed to monosubstituted EDTA and DTPA resulted from reaction of a model amine with the dianhydrides of EDTA and DTPA under various reaction conditions.

L20 ANSWER 2 OF 2 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

TI ENDOGENOUS CHOLECYSTOKININ MODULATES GASTRIC EMPTYING AND
POSTPRANDIAL RELEASE OF INSULIN IN HUMANS
INFLUENCIA DE LA COLECISTOKININA ENDOGENA EN EL VACIAMIENTO GASTRICO Y.

AB Aim of the study. To determine the effect of endogenous cholecystokinin (CCK) on gastric emptying and postprandial release of insulin in humans.

Materials and method. Six healthy volunteers underwent three experiments... liquid meal containing 100 g glucose, and an egg yolk mixed with 150 ml of milk. To evaluate gastric emptying, Tc99-DTPA (2 mCu) was added to the meal. To evaluate gallbladder emptying, Tc99-HIDA (5 mCu) was given i.v. one hour before. . .

=> s metal chelat?

34727 METAL

11101 METALS

40243 METAL

(METAL OR METALS)

4454 CHELAT?

L21 497 METAL CHELAT?

(METAL (W) CHELAT?)

=> d his

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L2 424 S DYMGWMDF/SQSP

FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006

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    http://www.stn-international.de/stndatabases/details/ipc-reform.html >>>
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DESIGNATED STATES
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ACCESSION NUMBER:
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TITLE (ENGLISH):
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                        APPLICATIONS
TITLE (FRENCH):
                        METALLO-ASSEMBLAGES DETERMINES STRUCTURALEMENT ET
                        APPLICATIONS
                        SHARMA, Shubh, D.
INVENTOR(S):
                        RHOMED INCORPORATED;
PATENT ASSIGNEE(S):
                        SHARMA, Shubh, D.
LANGUAGE OF PUBL.:
                        English
DOCUMENT TYPE:
                        Patent
PATENT INFORMATION:
                        NUMBER
                                           KIND
                                                    DATE
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US 1995-8/476,652

PRIORITY INFO.:

19950607

19960605

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L27
                       1996039128 PCTFULL ED 20020514
ACCESSION NUMBER:
                       PROTEIN PARTICLES FOR THERAPEUTIC AND DIAGNOSTIC USE
TITLE (ENGLISH):
                       PARTICULES PROTEIQUES A USAGE THERAPEUTIQUE ET
TITLE (FRENCH):
                       DIAGNOSTIQUE
                       YEN, Richard, C., K.
INVENTOR(S):
                       HEMOSPHERE, INC.;
PATENT ASSIGNEE(S):
                       YEN, Richard, C., K.
LANGUAGE OF PUBL.:
                       English
DOCUMENT TYPE:
                       Patent
PATENT INFORMATION:
                       NUMBER
                                                   DATE
                                          KIND
                       ______
                       WO 9639128
                                            A1 19961212
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L27
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ACCESSION NUMBER:
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                       MICROSPHERES GAZEUSES POUR APPLICATION TOPIQUE ET
TITLE (FRENCH):
                       SOUS-CUTANEE
INVENTOR(S):
                       UNGER, Evan, C.;
                       MATSUNAGA, Terry;
                       YELLOWHAIR, David
PATENT ASSIGNEE(S):
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                       MATSUNAGA, Terry;
                       YELLOWHAIR, David
LANGUAGE OF PUBL.:
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APPLICATION INFO.:
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PRIORITY INFO.:
                       US 1993-8/159,674
                       US 1993-8/159,687
                                               19931130
                       US 1993-8/160,232
                                               19931130
                       US 1994-8/307,305
                                               19940916
                       US 1994-8/346,426
                                               19941129
                        PCTFULL COPYRIGHT 2006 Univentio on STN
      ANSWER 5 OF 10
L27
                       1995005842 PCTFULL ED 20020514
ACCESSION NUMBER:
                       METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE
TITLE (ENGLISH):
                       DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION.
                       PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES
TITLE (FRENCH):
                       MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES
                       DYSFONCTIONNEMENTS DES MUSCLES LISSES
                       PASRICHA, Pankaj, J.;
INVENTOR(S):
                       KALLOO, Anthony, N.
                       THE JOHNS HOPKINS UNIVERSITY
```

PATENT ASSIGNEE(S):

DOCUMENT TYPE: Patent

PATENT INFORMATION: NUMBER KIND

_____ WO 9505842 A1 19950302

DESIGNATED STATES

CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO .: WO 1994-US9759 A 19940823 PRIORITY INFO.: US 1993-112,088 19930826

ANSWER 6 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1994004674 PCTFULL ED 20020513

HUMAN MELANOCYTE STIMULATING HORMONE RECEPTOR TITLE (ENGLISH): TITLE (FRENCH): RECEPTEUR D'HORMONE STIMULANT LE MELANOCYTE CHEZ

L'HOMME

INVENTOR(S): WIKBERG, Jarl; CHHAJLANI, Vijay

PATENT ASSIGNEE(S): WIKBERG, Jarl; CHHAJLANI, Vijay

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent'

PATENT INFORMATION:

KIND NUMBER WO 9404674 A1 19940303

DESIGNATED STATES

AU BB BG BR BY CA CZ FI HU JP KP KR KZ LK MG MN MW NO NZ PL RO RU SD SK UA US VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE

SN TD TG

APPLICATION INFO.: WO 1993-DK273 A 19930820 DK 1992-1046/92 PRIORITY INFO.: 19920821 DK 1992-1118/92 19920910 DK 1993-528/93 19930505

ANSWER 7 OF 10

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1993018797 PCTFULL ED 20020513

METHOD OF INTRAOPERATIVELY DETECTING AND LOCATING TITLE (ENGLISH):

TUMORAL TISSUES

PROCEDE POUR DETECTER ET LOCALISER DE FACON TITLE (FRENCH):

PEROPERATOIRE DES TISSUS TUMORAUX

ENSING, Geert, Jacob; INVENTOR(S):

PANEK, Karel, Jan; DOEDENS, Bareld, Jan

MALLINCKRODT MEDICAL, INC.; PATENT ASSIGNEE(S):

> ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent '

PATENT INFORMATION:

KIND DATE NUMBER ______ WO 9318797 Al 19930930

DESIGNATED STATES

AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL

APPLICATION INFO.: WO 1993-US2772 A 19930324

NL 1992-92200848.7 PRIORITY INFO.: 19920325

ANSWER 8 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN L27

ACCESSION NUMBER: 1992004916 PCTFULL ED 20020513 TITLE (ENGLISH): PARTICULATE AGENTS

AGENTS SOUS FORME DE PARTICULES TITLE (FRENCH):

INVENTOR(S): FILLER, Aaron, Gershon PATENT ASSIGNEE(S): ST. GEORGE'S ENTERPRISES LIMITED;

FILLER, Aaron, Gershon

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE -----WO 9204916 A2 19920402

DESIGNATED STATES

W: APPLICATION INFO.: PRIORITY INFO.:

AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL NO SE US A 19910913 WO 1991-EP1780

GB 1990-9020075.9 19900914 GB 1990-9023580.5 19901030 GB 1990-9027293.1 19901217 GB 1991-9100233.7 19910107 GB 1991-9100981.1 19910116 GB 1991-9102146.9 19910131 GB 1991-9110876.1 19910520

GB 1991-9117851.7 19910819 GB 1991-9118676.7 19910830

L27 ANSWER 9 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

1992001469 PCTFULL ED 20020513 ACCESSION NUMBER:

A COMPOSITION PROVIDING IMPROVED CLEARANCE OF BIOACTIVE TITLE (ENGLISH):

SUBSTANCES FROM THE BLOODSTREAM

COMPOSITION ASSURANT UNE MEILLEURE ELIMINATION DE TITLE (FRENCH):

SUBSTANCES BIOACTIVES CONTENUES DANS LE SYSTEME SANGUIN

19910730

INVENTOR(S):

SELMER, Johan PATENT ASSIGNEE(S): NOVO NORDISK A/S;

SELMER, Johan English

GB 1991-9116373.3

LANGUAGE OF PUBL.:

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE ______

WO 9201469

Al 19920206

DESIGNATED STATES

W:

AT AU BE CA CH CS DE DK ES FI FR GB GR HU IT JP KR LU

NL NO PL SE SU US

APPLICATION INFO.: PRIORITY INFO.:

WO 1991-DK215 A 19910724 DK 1990-1762/90 19900724

ANSWER 10 OF 10 L27

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1989009625 PCTFULL ED 20020513

TITLE (ENGLISH): TITLE (FRENCH):

CONTRAST AGENTS FOR MAGNETIC RESONANCE IMAGING AMELIORATIONS APPORTEES A L'IMAGERIE PAR RESONANCE

MAGNETIQUE

INVENTOR(S):

BERG, Arne;

KLAVENESS, Jo

PATENT ASSIGNEE(S):

COCKBAIN, Julian, Roderick, Michaelson;

NYCOMED AS; BERG, Arne; KLAVENESS, Jo

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

KIND DATE NUMBER _____ WO 8909625 · A1 19891019

DESIGNATED STATES

W:

AT AU BE CH DE DK FI FR GB IT JP LU NL NO SE US

APPLICATION INFO.: PRIORITY INFO.:

A 19890406 WO 1989-EP376 GB 1988-8808305.0 19880408

L27 ANSWER 10 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

DETD

metal chelates, for example of aminopolycarboxylic acids such as nitrilotriacetic acid (NTA)j]NrNrN1rN'-ethylenediaminetetraacetic acid (EDTA), N-hydroxyethyl--N,N1,N1-ethylenediaminetriacetic acid (HEDTA)r NrNrN'r-N'',N''-diethylenetriaminepentaacetic acid (DTPA), and 1,4,7,10-tetraazacyclododecanetetraacetic acid (DOTA) (see for example EP-A-71564, EP-A-130934t DE-A-3401052 and US-A-4639365). and Nycomed AS have suggested the use of paramagnetic metal chelates of iminodiacetic acids (see. . .

Intravenous administration, at separate timesf of the positive contrast agent Gd DTPA-dimeglumine (which following such administration rapidly distributes extracellularly) and of superparamagnetic ferrite particles was proposed by Weissleder et al.'in AJR 150: 561-566 (1988) for imaging. . .

the reticuloendothelial system targetting negative contrast agents of W085/04330. However,, extracellularly distributing paramagnetic metal containing positive contrast agents, such as Gd DTPAF Gd DOTA and Od DTPA-BMA (the gadolinium chelate of the bismethylamide of DTPA), may be used according to the present invention for administration into body cavities or tracts having externally voiding ducts, e.g. for oral. . .

metal

chelates in which the paramagnetic metal species + 3+ especially Dy 3+ are particularly is Tb or Sm or more preferred, eag, Dy DTPA-BMAr, or DyDTPA-beta-alanine-dextran (molecular weight 70000) where a blood pooling positive contrast agent is desired.

EDTA; DTPA-BMA; DOTA; desferrioxamine; and the physiologically acceptable salts thereof.

contrast agent,

if uniform distribution after i.v. administration is desired, one may conveniently use as the chelating moiety a hydrophilic extracellular substance, such as DTPA or DOTA or a chelating agent as claimed in W089/00557. However, to achieve tissue- or duct-specificity, for either positive or negative MRI contrast agents. . .

the same equipment against distilled water to a volume of 1150 ml, the pH-was adjusted to 9 with N-methylmorpholine and 29.18g of DTPA-bis-anhydride was added while the pH was kept at 8 using the same base. When the solution became clear, the reaction mixture was. . .

Gd 4.6%; N 2.15%; Na 0.16%; Cl less than 0101%, 1 Free Gd (xylene orange titration), DTPA, GdDTPA? citric acid, or DMSO (HPLC): less than 0.01%

(The percentages in the analysis results are by weight).

in three of the dogs to which the positive and negative contrast agents were administered, 1.0 unit/kg bodyweight of cholecystokinin were given intravenously 60 minutes after administration of the paramagnetic contrast agent immediately followed by examinations in the transverse and frontal projections.

gall bladder was also encountered 15 to 30 minutes after contrast agent administration. After administration of the superparamagnetic and paramagnetic contrast agents and after cholecystokinin injection, the gall bladder was moderately contracted and visualization of the choledocus duct was achieved as well as contrast filling of the duodenum.

=> d ibib kwic 1-9

L27 ANSWER 1 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN ACCESSION NUMBER: 2001076631 PCTFULL no bibliographic data available - please use FPI for PI information DESIGNATED STATES

DETD 37(4):449-57 [1997]; McHugh, PR. and Moran, TH., The stomach, cholecystokinin, and satiety, Fed. Proc. 45(5):13 84-90 [1986]; Lin, H.C. et al., Frequency ofgastric pacesetter potential depends on volume and site of distension,. . .

There may also be some interactions between 5-HT receptor-mediated effects and cholecystokinin-mediated effects on satiety. (Voight, J.P. et al., Evidencefor the involvement of the 5-HTIA receptor in CKK induced satiety in rats, Nauyn Schmiedebergs Arch. Pharmacol. 351(3):217-20 [1995]; Varga, G. et al., Effect of deramciclane, a new 5-HT receptor antagonist, on cholecystokinin -induced changes in ratgastrointesfinalfunction, Eur. J. Pharmacol. 367(2-3):315-23 [1999]; but see, Eberle-Wang, K. and Simansky, K.J., Yhe CKK-A receptor antagonist, devazepide, blocks. . .

2 o Behav. 43(3):943-47 [1992]). The neuropeptide hormone cholecystokinin is known to induce satiety, inhibit gastric emptying, and to stimulate digestive pancreatic and gall bladder activity. (Blevins, J.E. et al., Brain regions where cholecystokinin suppresses feeding in rats, Brain Res. 860(1-2):1-10 [2000]; Moran, TH. and McHugh, P.R., Cholecystokinin suppressesfood intake by inhibiting gastric emptying, Am. J. Physiol.

Cholecystokinin, and other neuropeptides, such as bombesin, arnylin, proopiomelanocortin, corticoptropin-releasing factor, galanin, melanin-concentrating hormone, neurotensin, agouti-related protein, leptin, and neuropeptide Y, are important 3. . .

```
G. et al., Effect of deramciclane, a new 5-HT receptor antagonist, on
      cholecystokinin-
       1 0 induced changes in rat gastrointestinalfunction, Eur. J. Pharmacol.
       367(2-3):315-23
       [1999]), or alosetron. 5-HT4 receptor antagonists are preferably used at
       0 with phosphate buffer, pH 7.0, at 2 mL/min. 60 minutes after the start
      of the perfusion,
       5 1
      -20 [Xi of Tc-DTPA (diethylenetlianiinepentaacetic acid) was
      delivered as a bolus into
      the test segment. Intestinal transit was then measured by counting the
      radioactivity of.
       liquid marker across the approximately 150 cm intestinal test segment by
      delivering
      about 20 qCi 'Tc chelated to diethyltriamine pentaacetic acid (
       DTPA) (Cunningham,
       K.M. et al., Use of technicium-99m (V)thiocyanate to measure gastric
       emptying offat,
       J. Nucl. Med. 32:878-881 [1991]) as a bolus into the. . . gamma well
       counter. After correcting
      all counts to time zero, intestinal transit was calculated as the
       cumulative percent recovery
      of the delivered Tc-DTPA. This method has been well validated
       over the years and
       appreciated for its advantage of minimal inadvertent marker loss. To
       demonstrate.
                                  COPYRIGHT 2006 Univentio on STN
      ANSWER 2 OF 10
                        PCTFULL
ACCESSION NUMBER:
                        1996040293 PCTFULL ED 20020514
                        STRUCTURALLY DETERMINED METALLO-CONSTRUCTS AND
TITLE (ENGLISH):
                       APPLICATIONS
                       METALLO-ASSEMBLAGES DETERMINES STRUCTURALEMENT ET
TITLE (FRENCH):
                       APPLICATIONS
                        SHARMA, Shubh, D.
INVENTOR(S):
                       RHOMED INCORPORATED;
PATENT ASSIGNEE(S):
                        SHARMA, Shubh, D.
LANGUAGE OF PUBL.:
                        English
DOCUMENT TYPE:
                        Patent
PATENT INFORMATION:
                        NUMBER
                                          KIND
                                                    DATE
                        ______
                        WO 9640293
                                            A1 19961219
DESIGNATED STATES
                        AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI
    · W:
                        GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD
                        MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM
                        TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ
                        MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC
                        NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
APPLICATION INFO.:
                        WO 1996-US9840
                                            A 19960606
PRIORITY INFO.:
                        US 1995-8/476,652
                                                19950607
                        US 1996-8/660,697
                                                19960605
         . . or Cu., to an equirnolar covalent
DETD
       adduct of diethylenetriaminepentaacetic acid (DT?A) with
       ethylenediamine. This adduct
       may be achieved by reacting ethylenediamine with DTPA
       -dianhydride. The amino group
       of the ethylenediamine moiety in this adduct, together with the free
       carboxylate of the DTPA
```

(preferred dose range of 0 5 mg/kg), deramciclane (Varga,

moiety, mimic the two primary integrin receptor-binding functionalities. The use of higher hornologues of ethylenediarnine, or use of other di-amines, such as.

a reversed turn structure as their hypothesized biologically active structure. The exan3ples of these include various peptide hormones such as somatostatin, cholecystokinin, opioid peptides, melanotropins, luteinizing hormone releasing hormone, tachykinins and various antibody epitopes.

ANSWER 3 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN L27 1996039128 PCTFULL ED 20020514 ACCESSION NUMBER:

TITLE (ENGLISH): PROTEIN PARTICLES FOR THERAPEUTIC AND DIAGNOSTIC USE

TITLE (FRENCH): PARTICULES PROTEIQUES A USAGE THERAPEUTIQUE ET

DIAGNOSTIQUE

INVENTOR(S): YEN, Richard, C., K. PATENT ASSIGNEE(S): HEMOSPHERE, INC.;

YEN, Richard, C., K.

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE _____ Al 19961212 WO 9639128

DESIGNATED STATES

AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

APPLICATION INFO .: WO 1996-US9458 A 19960604 US 1995-8/471,650 PRIORITY INFO.:

19950606 19951109 US 1995-8/554,919

DETD . . factor beta

receptor

- 14. anti-beta-lipoprotein
- 15. alpha 2-macroglobulin
- 16. streptokinase
- 17. anti-progesterone antibody
- 18. anti-leukotriene B4 antibody
- 19. CGGRGDF-NH2
- 20. doxorubicin
- 21. daunarubicin
- 22. EDTA-conjugated to HSA
- 23. DTPA-conjugated to HSA
- 24. technetium
- 25. gadolinium
- 26. HSA conjugated to FITC (Fluorescein

Isothiocyanate)

27. HSA conjugated to TRITC (Tetramethylrhodamine B

isothiocyanate)

28. HSA conjugated to. . Tc99m can be achieved through direct covalent bonding or through a chelating agent. Examples of chelating agents are cysteine-cyclohexanol conjugate and DTPA

Biologically active peptides: myl-L-Ala-D-Glu Amide N-Acetyl-Asp-Glu 42

```
N-Acetyl-Cholecystokinin and its fragments
      N-Acetyl-Hirudin and its fragments
      Acetyl-Leu-Leu-Argininal
      N-Acetyl-Leu-Leu-Methioninal
      N-Acetyl-Leu-Leu-Norleucinal
      Acetyl-Met-Asp-Arg-Val-Leu-Ser-Arg-Tyr
      N-Acetyl-Met-Leu-Phe
      N-Acetylmuramyl-D-alanyl-D-isoglutamine
      N-Acetylmuramyl-L-alanyl-D-isoglutamine
      N-Acetylmuramyl-L-alanyl-L-isoglutamine
      N-Acetylmuramyl-Ala-D-isoglutaminyl-Ne-stearoyl-Lys
      N-Acetyl-Phe-Nle-Arg-Phe Amide
      Acetyl-Renin Substrate Tetradecapeptide
      Acetyl-Ser-Asp-Lys-Pro
      Acetyl-Ser-Gln-Asn-Tyr
      Acetyl-Ser-Gln-Asn-Tyr-Pro-Val-Val Amide.
       Carassin
      N-Carboxymethyl-Phe-Leu
       Cardioexcitatory Peptide
       alpha-Casein and fragments
       Beta-Casomorphin
      Na-CBZ-Arg-Arg-Pro-Phe-His-Sta-Ile-His-Ne-BOC-Lys Methyl
                                                                      Ester
              Ester
      CBZ-Leu-Val-Gly Diazomethyl Ketone
       N-CBZ-D-Phe-Phe-Gly
       N-CBZ-Pro-D-Leu
       N-CBZ-Pro-Leu-Gly Hydroxamate
       CD4 and fragments
       Cecropins
       Cerebellin
       Chemostactic Peptides
         Cholecystokinin and fragments
       Chorionic Gonadotropin and fragments
       Chromostatin-20
       Chymostatin
       Circumsporozoite (CS) Protein of Plasmodium falciparum
       repetitive sequences
       Collagen
       Conotoxin GI
       A-conotoxin GIIIB
       w-conotoxin GVIA
       a-conotoxin SI
       Copper.
       NITR7, DM-nitrophen, NITRS/AM; Ammonium N-
       nitrosophenyl-hydroxylamine; Ammonium purpurate;
       alpha-Benzoin oxime; N, N-Bis-(hydroxyethyl)-glycine;
       2,3-butane-dione dioxime; Trans-1,2-Diaminocyclo-
       hexanetetra-acetic acid (CDTA); Diethylene-
       triaminopenta-acetic acid (DTPA); 4,5-Dihydroxy-
       benzene-1,3-disulphonic acid; 2,3-Dimercapto-1-
       Propanol; Diphenylthio-carbazone; 2,2'-Dipyridyl;
       3,6-Disulpho-1,8-dihydroxy-naphthalene;
       Dithiooxamide; Eriochrome Black T; Ethylene-diamine;
       Ethylenediaminetetraacetic acid (EDTA); (Ethylene-
       dioxy)-diethylenedinitrilo-tetraacetic acid (EGTA);
       o-Hydroxybenzaldehyde.
                                   COPYRIGHT 2006 Univentio on STN
       ANSWER 4 OF 10
                         PCTFULL
ACCESSION NUMBER:
                        1995015118 PCTFULL ED 20020514
                        GAS MICROSPHERES FOR TOPICAL AND SUBCUTANEOUS
TITLE (ENGLISH):
                        APPLICATION
                        MICROSPHERES GAZEUSES POUR APPLICATION TOPIQUE ET
TITLE (FRENCH):
```

L27

SOUS-CUTANEE

INVENTOR(S):

UNGER, Evan, C.; MATSUNAGA, Terry; YELLOWHAIR, David

PATENT ASSIGNEE(S):

UNGER, Evan, C.; MATSUNAGA, Terry; YELLOWHAIR, David

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE ______ WO 9515118 A1 19950608

DESIGNATED STATES

W:

AU CA CN JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL

PT SE

APPLICATION INFO.: PRIORITY INFO.:

WO 1994-US13817 · A 19941130 US 1993-8/159,674 19931130 US 1993-8/159,687 19931130 US 1993-8/160,232 19931130 US 1994-8/307,305 19940916 US 1994-8/346,426 19941129

. . of topical or

subcutaneous application and delivery: melanin concentrating hormone,, melanin stimulating hormone, trypsin inhibitor, Bowman Burk inhibitor, luteinizing hormone releasing hormone (LHRH), bombesin, cholecystokinin, insulin, gastrin, endorphins, enkephalins, growth hormone, prolactin, oxytocin, follicle stimulating hormone (FSH), human chorionic gonadotropin,, corticotropin, 0 and lipotropin, calcitonin, glucagon, thyrotropin, elastin, cyclosporin,.

Suitable chelants and chelating agents include, but are not limited to: penicillamine; citrate; ascorbate; diethylenetriaminepentaacetic acid (DTPA), and derivatives and salts thereof; dihydroxypropylethylenediamine (DPEA), and derivatives and salts thereof; cyclohexanediaminetetraacetic acid (CHTA), and derivatives and salts thereof; ethylenediaminetetraacetic acid (EDTA), and. . thereof; N,Nf-(1,2-ethanedivinylbis(oxy-2,1-phenylene))bis(N-(carboxymethyl) (BAPTA), and derivatives and salts thereof; aminophenol-triacetic acid (APTRA), and derivatives and salts thereof; tetrakis(2-pyridylmethyl)ethylenediamine (TPEN), and derivatives and salts thereof; 1.4,7,10-tetraazacyclodecane (DOTA) and derivatives and salts thereof; and cyanins and their derivatives, Furthermore, immunosuppressants or antiinflammatory preparations can be incorporated into the gas

These metal ions may be incorporated into the microspheres as free salts, as complexes, e,g., with EDTA, DTPA, DOTA desferrioxamine, or as oxides of the metal ions, Additionally, derivatized complexes of the metal ions may be bound to lipid head groups,.

CLMEN. . . peptides selected from the group consisting of melanin concentrating hormone, melanin stimulating hormone,

trypsin inhibitor, Bowman Burk inhibitor, luteinizing hormone releasing hormone, bombesin, cholecystokinin, insulin, gastrin, endorphins, enkephalins, growth hormone, prolactin, oxytocin, follicle stimulating hormone, human chorionic gonadotropin, corticotropin, 0-lipotropin, 7-lipotropin,

calcitonin, glucagon, thyrotropin, elastin, cyclosporin, and collagen, and. \cdot

peptides selected from the group consisting of melanin concentrating hormone, melanin stimulating hormone, trypsin inhibitor, Bowman Burk inhibitor, luteinizing hormone releasing hormone, bombesin, cholecystokinin, insulin, 10 gastrin, endorphins, enkephalins, growth hormone, prolactin, oxytocin, follicle stimulating hormone, human chorionic gonadotropin, corticotropin, fl-lipotropin, T-lipotropin, calcitonin, glucagon, thyrotropin, elastin, cyclosporin, and collagen, . . .

L27 ANSWER 5 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1995005842 PCTFULL ED 20020514

TITLE (ENGLISH): METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE

DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION

TITLE (FRENCH): PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES

MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES DYSFONCTIONNEMENTS DES MUSCLES LISSES

INVENTOR(S): PASRICHA, Pankaj, J.;

KALLOO, Anthony, N.

PATENT ASSIGNEE(S): THE JOHNS HOPKINS UNIVERSITY

DOCUMENT TYPE: Patent

PATENT INFORMATION:

DESIGNATED STATES

W: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO.: WO 1994-US9759 A 19940823 PRIORITY INFO.: US 1993-112,088 19930826

DETD Figs. 3A and B show the effect of intrasphincteric injection of BoTx on LES response to cholecystokinin octapeptide (CCK)

0.01). The response of the LES to the IV administration of edrophonium (Tensilon; ICN Pharmaceuticals Inc., Costa Mesa, CA) and cholecystokinin

octapeptide (CCK-8) (Kinevac; ER Squibb amp; Sons,

Princeton, NJ) in three

additional piglets was also measured. LES pressures, measured by a DENTSLEEVE, were. . .

retention studies

After an overnight fast, patients were asked to ingest a corn-flake meal with milk containing 0.531 mci 99 aiTc DTPA. Subsequently, serial dynamic

images were obtained with the subject sitting erect in front of a gamma camera.

Retention was expressed.

L27 ANSWER 6 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1994004674 PCTFULL ED 20020513

TITLE (ENGLISH): HUMAN MELANOCYTE STIMULATING HORMONE RECEPTOR
TITLE (FRENCH): RECEPTEUR D'HORMONE STIMULANT LE MELANOCYTE CHEZ

L'HOMME

INVENTOR(S):
WIKBERG, Jarl;

CHHAJLANI, Vijay

PATENT ASSIGNEE(S): WIKBERG, Jarl; CHHAJLANI, Vijay

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 9404674 A1 19940303

DESIGNATED STATES

· W:

AU BB BG BR BY CA CZ FI HU JP KP KR KZ LK MG MN MW NO NZ PL RO RU SD SK UA US VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE

SN TD TG

APPLICATION INFO.: PRIORITY INFO.:

WO 1993-DK273 A 19930820 DK 1992-1046/92 19920821 DK 1992-1118/92 19920910 DK 1993-528/93 19930505

DETD . . . th

substance P receptor, substance K receptor, endothelin receptor, angiotensin receptor, chemoattractant peptide receptor, bombesin receptor, oxytocin receptor, vasopressin receptor, antidiuretic hormone receptor, gastrin receptor, cholecystokinin receptor, canabinoid receptor, follicle stimulating hormone receptor, luteinizing hormone receptor, growth hormone receptor, thyrotropin receptor, calcitonin receptor, calcitonin gene related peptide receptor and/or parathyroid. . .

isothiocyanatobenzyl EDTA (CITC), diethylenetriaminepenta-acetic acid (DTPA) and be coupled via the mixed anhydride or the cyclic anhydride (Hnatowich 1990). However, since such complexes may provide somewhat unstable chelation and moreover during their manufacture intra and intermolecular cross linking of antibodies, other chelators such as e.g. GYK-DTPA or SCN-Bz-DTPA may be used as an alternative (Hnatowich 1990). Radiolabelling of 99mTc to the antibody may be afforded by using direct labelling techniques. . .

L27 ANSWER 7 OF 10

PCTFULL COPYRIGHT 2006 Univentio on STN "

ACCESSION NUMBER: .

1993018797 PCTFULL ED 20020513

TITLE (ENGLISH):

METHOD OF INTRAOPERATIVELY DETECTING AND LOCATING

TUMORAL TISSUES

TITLE (FRENCH):

PROCEDE POUR DETECTER ET LOCALISER DE FACON

PEROPERATOIRE DES TISSUS TUMORAUX

INVENTOR(S):

ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

PATENT ASSIGNEE(S):

MALLINCKRODT MEDICAL, INC.;

ENSING, Geert, Jacob; PANEK, Karel, Jan; DOEDENS, Bareld, Jan

LANGUAGE OF PUBL.:
DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

DESIGNATED STATES

W:

AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL

PT SE

APPLICATION INFO.: PRIORITY INFO.:

WO 1993-US2772 A 19930324 NL 1992-92200848.7 19920325

DETD . . . thyroid-stimulating hormone,

vasoactive intestinal polypeptide, prolactin, thyrotropin-releasing hormone, insulin,

adrenocorticotropic hormone (ACTH), in particular o(--MSH

(melanocyte-stimulating

hormone) and f -(methylsulfonyl)-L- c4-aminobutyryl-L-d-glutamyl-L-histidyl-L-

0 phenylaianyl-D-lysyl-L-phenylaianine, cholecystokinin, corticotropin-releasing hormone (CRH), growth hormone-releasing hormone (GRH), arginine and lysine vasopressin, oxytocin, glucagon, secretin, parathyroid hormone (PTH) and PTH related peptide.

bond to an amino group of said peptide and is derived from ethylene diamine tetra-acetic acid (EDTA), ethylene triamine penta-acetic acid (DTPA), ethyleneglycol-0,0'-bis(2aminoethyl)-N, N, N', N'-tetra-acetic acid (EGTA), N, N-bis(hydroxybenzyl)ethylenediamine-N, N'-diacetic acid (HBED), triethylene tetramine hexa-acetic. acid (TTHA), 1,4,7,10-tetraazacyclododecane-N,N',N,N'-tetra-acetic acid (DOTA), 1 8,11-tetra-azacyclotetradecane-NN',N,N'-tetra-acetic (TETA),, 1 diaminocyclohexane tetra-acetic acid (DCTA), substituted substituted EDTA, or from a compound of the general formula -R-S] Y wherein R is a branched or non-branched, optionally substituted hydrocarbyl radical,.

A, Preparation of DTPA-Octreotide kit
The DTPA-Octreotide kit formulated on basis of sodium
acetate buffer with the final composition
3,89 mg sodium acetate
0,029 mg acetic acid
10 gg DTPA-Octreotide
per vial is prepared as follows.

To formulate the kit, $0.5~\mathrm{mg}$ of DTPA-Octreotide is dissolved in 4 ml of acetic acid solution, and 5 ml of sodium acetate solution are added.

In a similar way, starting from 2.5 mg DTPA-Octreotide was also prepared and a kit containing $50 \, \mathrm{gg}$ DTPA-Octreotide per vial.

C, Labelling of DTPA-Octreotide kit with Tb Several kits of DTPA-Octreotide, prepared according to Example I containing 10 or 50 gg DTPA-Octreotide, are labelled by addition of 0.5 ml of Tb-161 solution obtained under B. The mixture is incubated for 30 min. at room temperature.

ITLC as described above,
Tb DTPA-Octreotide Rf ca 0 0.6
Free Tb-161 Rf ca 0,9 0
Hydrolysed Tb-161 Rf ca 0 0,1
HPLC: Column: gBondapakBC 18 10pn, 3.9 x.

>92% 78.4% >93% challenge experiment with serum (bovine), added at 24 h 76.4% >95%

Free Tb-161 was not detectable in any kit containing 50 gg DTPA-Octreotide.

h - HPLC 96.2%

HPLC identification positive, because UV spectrum and activity peaks of Tb-161 are found identical with those for In-III labelled DTPA-Octreotide used as control.

EXAMPLE 11

Labelling of DTPA-Octreotide kit with Yb-175 and its use in combination with detectincr agent DTPA I-Tvr'-Octreotide A. Labellincf of DTPA-Octreotide kit with Yb Ca 1 mg of enriched (97.8%) 174-Yb202 is irradiated for 48 hours in a nuclear reactor with thermal. . .

Several kits containing 10 gg of DTPA-Octreotide prepared according to Example I are labelled by addition of I ml of the Yb-175 stock solution. The mixture is let to-incubate 30.

Yb-175 Octreotide: LY at 3 ho ITLC Rf 0 06 91,2% at 24 h. ITLC Rf 0,5-06 91,7% B, Preiparation of DTPA 125-Tyr3-Octreotide.

DTPA-Tyr3-Octreotide of the formula DTPA- (D) Phe-Cys -Tyr*- (D) Trp-Lys -Thr-Cys -Throl is prepared from Tyr3-Octreotide in a corresponding manner as described in Int, Pat, Appln, WO. . . Example 1, and further iodinated with 125I sodium iodide, dissolved in phosphate buffer in the presence of chloramine T. The molar ratio of DTPA-Tyr3-Octreotide; chloramine T: 125-I is 1:4,6:0,6 The reaction is terminated with 10% BSA solution. The labelled product of the above formula wherein Tyr] = . . .

To combine the therapeutical effect with the radioguided surgery are used both preparations; Yb Octreotide for the desired therapeutic effect and DTPA I-Tyr 3_Octreotide as the detectingu agent, Depending on the conditions, they can be used separately, in this case by administering Yb Octreotide first to cause partial or deep tumour necrosis, followed by administration of DTPA I-Tyr3-Octreotide to guide the tumours removal, or they can be administered simultaneously as a mixture in an appropriate ratio. Such a mixture. . .

EXAMPLE III

Labelling of DTPA-Octreotide kit with Ho-166 and its use in combination with Octreotide labelled with Tb A. Labelling of DTPA-Octreotide kit with Ho 6-Ca 1 mg of natural (monoisotopic) 165-Ho2O3 is irradiated for 48 hours in nuclear reactor with a thermal. . . .

Several kits, containing lOgg of DTPA-Octreotide prepared according to Example I., are labelled by addition of 0.5 or 1 ml of Ho-166 stock solution. The mixture is let. . .

Labelled Ho Octreotide 9111% Free Ho-166 8,9% B. Pre-oaration of DTPA-Tb Octreotide as described in Example I., with kit containing 50 Ltq DTPA-Octreotide.

CLMEN. . . amide bond to an amino group of said peptide and being derived from ethylene diamine tetra-acetic acid (EDTA), diethylene triamine penta-acetic acid (DTPA), ethyleneglycol-0,01-bis(2-aminoethyl)-N,N,N',N'-tetra-acetic acid (EGTA), N,N.bis(hydroxybenzyl)-

ethylenediamine-N,N'-diacetic acid (HBED), triethylene tetramine hexa-acetic acid (TTHA), 1,4,7,10-tetraazacyclododecane-N,N,N,Nf-tetra-acetic acid (DOTA),, 1 8,,11-tetra-azacyclotetradecane-N,N',N,N'-tetra-acetic acid (TETA), 1,2-diaminocyclohexane tetra-acetic acid (DCTA), substituted DTPA, substituted EDTA, or from a compound of the general formula NO wherein R is a branched or non-branched, optionally substituted hydrocarbyl radical, which may be. . .

ANSWER 8 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN ACCESSION NUMBER: 1992004916 PCTFULL ED 20020513 TITLE (ENGLISH): PARTICULATE AGENTS TITLE (FRENCH): AGENTS SOUS FORME DE PARTICULES FILLER, Aaron, Gershon INVENTOR(S): PATENT ASSIGNEE(S): ST. GEORGE'S ENTERPRISES LIMITED; FILLER, Aaron, Gershon LANGUAGE OF PUBL.: English ' DOCUMENT TYPE: Patent PATENT INFORMATION: NUMBER KIND DATE WO 9204916 A2:19920402 DESIGNATED STATES AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL NO SE US W: APPLICATION INFO .: · WO 1991-EP1780 A 19910913 PRIORITY INFO.: GB 1990-9020075.9 19900914 GB 1990-9023580.5 19901030 GB 1990-9027293.1 19901217 GB 1991-9100233.7 19910107 GB 1991-9100981.1 19910116 GB 1991-9102146.9 19910131

19910520

19910730

19910819

19910830

DETD Paramagnetic contrast agents such as gadolinium-DTPA act primarily by altering T, relaxation rates.

GB 1991-9110876.1

GB 1991-9116373.3

GB 1991-9117851.7

GB 1991-9118676.7

its ease of use as a histocheiAcal marker. Other studies have demonstrated transport of a wide variety of substances including Vasoactive Intestinal Polypeptide (VIP), cholecystokinin, substance P and somatostatin, neuropeptide-Y, and adriamycin. These types of tracers have sometimes been introduced by intravenous injection with subsequent uptake by neurons. . .

The use of a magnetic resonance small molecule contrast agent such as gadolinium-DTPA (diethylene-triaminepentaacetic acid) required the introduction of a very high concentration into the nerve and this amount was beyond what could be achieved, . . .

6) A wide variety of peptides and small proteins such as endorphins, vasoactive intestinal polypeptide, calcitonin gene-related peptide, cholecystokinin, substance P, somatostatin, and neuropeptide Y or the relevant portions of such peptides for the encouragement - 53

of neuronal uptake and transport.

Additional types of agents for imaging include paramagnetic metal chelates of polychelants (e.g. polylysine gadolinium-DTPA 40 which uses the macromolecularlparticulate aspects of uptake to introduce groups of paramagnetic nuclei (40 Gd atoms per molecule) (see EP-A-305320, EP-A-357622, EP-A-355097, EP-A-331616,...

27 ANSWER 9 OF 10 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 1992001469 PCTFULL ED 20020513

TITLE (ENGLISH): A COMPOSITION PROVIDING IMPROVED CLEARANCE OF BIOACTIVE

SUBSTANCES FROM THE BLOODSTREAM

TITLE (FRENCH): COMPOSITION ASSURANT UNE MEILLEURE ELIMINATION DE

SUBSTANCES BIOACTIVES CONTENUES DANS LE SYSTEME SANGUIN

INVENTOR(S): SELMER, Johan

PATENT ASSIGNEE(S): NOVO NORDISK A/S;

SELMER, Johan

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

DOCUMENT TYPE: Pate:
PATENT INFORMATION:

DESIGNATED STATES

W: AT AU BE CA CH CS DE DK ES FI FR GB GR HU IT JP KR LU

NL NO PL SE SU US

APPLICATION INFO.: WO 1991-DK215 A 19910724 PRIORITY INFO.: DK 1990-1762/90 19900724

DETD . . radioimaging leukocytes by injecting a conjugate of an antibody reactive with a leukocyt6 surface molecule and a radioisotope chelated with an EDTA or DTPA derivative followed by the injection of an antibody against the conjugate in order to clear the conjugate/antibody complex through the reticuloendothelial system.. . .

hormone,,; follicle-Stimulating hormone,, luteinising hormoner adrenocorticotropic hormone, parathyroidea hormone, prolactin, lipotropin J, cholecystokinin, calcitonin, secretin, atrialnatriuretic factor, endothelin, vasoactive intestinal polypeptider transferrin, tachykinin Intercellular adhesion factors intercellular adhesion molecule 1, endothelial leukocyte. . .

=> octapeptide OCTAPEPTIDE IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

```
1500 OCTAPEPTIDE
           238 OCTAPEPTIDES
          1631 OCTAPEPTIDE
L28
                 (OCTAPEPTIDE OR OCTAPEPTIDES) .
=> s 128 and (DTPA or DOTA)
          5576 DTPA
            12 DTPAS
          5579 DTPA
                 (DTPA OR DTPAS)
          1767 DOTA
             5 DOTAS
          1768 DOTA
                 (DOTA OR DOTAS)
L29
            86 L28 AND (DTPA OR DOTA)
=> s 129 not py>1996
        935225 PY>1996
L30
            15 L29 NOT PY>1996
=> s 130 and CCK
          2003 CCK
            36 CCKS
          2007 CCK
                 (CCK OR CCKS)
L31
             1 L30 AND CCK
=> d ibib
       ANSWER 1 OF 1
                         PCTFULL COPYRIGHT 2006 Univentio on STN
                        1995005842 PCTFULL ED 20020514
ACCESSION NUMBER:
                        METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE
TITLE (ENGLISH):
                        DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION
                        PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES
TITLE (FRENCH):
                        MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES
                        DYSFONCTIONNEMENTS DES MUSCLES LISSES
INVENTOR(S):
                        PASRICHA, Pankaj, J.;
                        KALLOO, Anthony, N.
                        THE JOHNS HOPKINS UNIVERSITY
PATENT ASSIGNEE(S):
DOCUMENT TYPE:
                        Patent
PATENT INFORMATION:
                        NUMBER
                                           KIND
                        _____,
                        WO 9505842
                                          . A1 19950302
DESIGNATED STATES
                        CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
       W:
                                         A 19940823
APPLICATION INFO .:
                        WO 1994-US9759
                        US 1993-112,088
                                               19930826
PRIORITY INFO.:
=> d kwic
       ANSWER 1 OF 1
                         PCTFULL
                                   COPYRIGHT 2006 Univentio on STN
L31
DETD
       Figs. 3A and B show the effect of intrasphincteric injection of BoTx on
       LES response to cholecystokinin octapeptide (CCK)
       The response of the LES to the IV administration of edrophonium
       (Tensilon; ICN Pharmaceuticals Inc., Costa Mesa, CA) and cholecystokinin
         octapeptide (CCK-8) (Kinevac; ER Squibb amp; Sons,
       Princeton, NJ) in three
       additional piglets was also measured. LES pressures, measured by a
```

DENTSLEEVE, were recorded in response to IV edrophonium (5 mg). After a

SUBSTITUTE SHEET (RULE 26)

=> s octapeptide

```
Subsequently, BoTx was injected into the LES, as described above, and
       experiment was. .
       Intrasphincteric BoTx also altered the response of the LES to
       (Figure 3). In untreated piglets, CCK did not cause any
       significant change in
       LES pressure. However, after intrasphincteric BoTx injection, a
       significant
       increase in LES pressure was seen in response to CCK. It
       should be noted that.
       despite what was felt to be an adequate washout period (10 minutes) in
       between
       injections, basal. . . .
       retention studies
       After an overnight fast, patients were asked to ingest a corn-flake meal
       with milk containing 0.531 mci 99 aiTc DTPA. Subsequently,
       serial dynamic
       images were obtained with the subject sitting erect in front of a gamma
       camera.
       Retention was expressed.
=> d his
     (FILE 'HOME' ENTERED AT 13:35:48 ON 07 DEC 2006)
     FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006
            136 S DY'NLE'GW'NLE'DF/SQSP
L1
            424 S DYMGWMDF/SOSP
L2
     FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006
L3
             84 S L1
L4
              0 S DPTA AND L3
L5
              5 S DOTA AND L3
         134722 S CHELAT?
L6
L7
             12 S L6 AND L3
L8
              0 S'L7 NOT PY>1997
L9
              1 S L7 NOT PY>1998
           4485 S L2
L10
             49 S L10 AND L6
L11
             20 S L11 NOT PY>1997
L12
L13
             20 S L11 NOT PY>1996
          14458 S METAL CHELAT?
L14
              3 S L14 AND L10
L15
L16
              4 S L10 AND (DPTA OR DOTA)
L17
              9 S L10 AND DTPA
     FILE 'DISSABS' ENTERED AT 13:46:43 ON 07 DEC 2006
L18
            323 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8)).
L19
            360 S DTPA OR DOTA
L20
              2 S L19 AND L18
L21
            497 S METAL CHELAT?
L22
              0 S L21 AND L18
     FILE 'PCTFULL' ENTERED AT 13:50:53 ON 07 DEC 2006
L23
           2006 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8))
L24
           2224 S DPTA OR DOTA
L25
           6121 S DTPA OR DOTA
L26
            110 S L25 AND L23
L27
             10 S L26 NOT PY>1996
```

washout period of 10 minutes, CCK (5 µ g IV) was then

administered.

```
L28
           1631 S OCTAPEPTIDE
L29
            86 S L28 AND (DTPA OR DOTA)
L30
             15 S L29 NOT PY>1996
             1 S L30 AND CCK
L31
=> s 123 and chelat?
         44321 CHELAT?
           591 L23 AND CHELAT?
L32
=> s 132 and (radio? or imag?)
        190519 RADIO?
        202203 IMAG?
L33
           495 L32 AND (RADIO? OR IMAG?)
=> s 133 not py>1996
        935225 PY>1996
            34 L33 NOT PY>1996
=> d his
     (FILE 'HOME' ENTERED AT 13:35:48 ON 07 DEC 2006)
     FILE 'REGISTRY' ENTERED AT 13:36:14 ON 07 DEC 2006
L1
            136 S DY'NLE'GW'NLE'DF/SQSP
L2
            424 S DYMGWMDF/SQSP
     FILE 'CAPLUS' ENTERED AT 13:39:00 ON 07 DEC 2006
L3
             84 S L1
L4
              0 S DPTA AND L3
              5 S DOTA AND L3
L5
         134722 S CHELAT?
L6
L7
          12 S L6 AND L3
              0 S L7 NOT PY>1997
L8
L9
              1 S L7 NOT PY>1998
L10
           4485 S L2
             49 S L10 AND L6
L11
             20 S L11 NOT PY>1997
L12
L13
             20 S L11 NOT PY>1996
L14
          14458 S METAL CHELAT?
L15
              3 S L14 AND L10
L16
              4 S L10 AND (DPTA OR DOTA)
L17
              9 S L10 AND DTPA
     FILE 'DISSABS' ENTERED AT 13:46:43 ON 07 DEC 2006
L18
            323 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8))
L19
            360 S DTPA OR DOTA
L20
              2 S L19 AND L18
L21
            497 S METAL CHELAT?
L22
            0 S L21 AND L18
     FILE 'PCTFULL' ENTERED AT 13:50:53 ON 07 DEC 2006
           2006 S CHOLECYSTOKININ OR (CCK-8 OR CCK8 OR (CCK () 8))
L23
L24
           2224 S DPTA OR DOTA
L25
           6121 S DTPA OR DOTA
L26
           110 S L25 AND L23
            10 S L26 NOT PY>1996
L27
L28
           1631 S OCTAPEPTIDE
L29
            86 S L28 AND (DTPA OR DOTA)
L30
             15 S L29 NOT PY>1996
L31
             1 S L30 AND CCK
L32
            591 S L23 AND CHELAT?
L33
            495 S L32 AND (RADIO? OR IMAG?)
L34
             34 S L33 NOT PY>1996
```

=> d ibib 1-8

PCTFULL COPYRIGHT 2006 Univentio on STN L35 ANSWER 1 OF 8

1996039161 PCTFULL ED 20020514 ACCESSION NUMBER:

MULTI-TYROSINATED SOMATOSTATIN ANALOGS TITLE (ENGLISH):

ANALOGUES DE LA SOMATOSTATINE CONTENANT PLUSIEURS DE TITLE (FRENCH):

TYROSINES

COY, David, H.; INVENTOR(S):

> WOLTERING, Eugene, A.; O'DORISIO, M., Sue; O'DORISIO, Thomas, M.;

MURPHY, William, A.

THE ADMINISTRATORS OF THE TULANE EDUCATIONAL FUND ; PATENT ASSIGNEE(S):

> THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION; THE LOUISIANA STATE UNIVERSITY MEDICAL CENTER

FOUNDATION;

CHILDREN'S HOSPITAL, INC.

LANGUAGE OF PUBL.:

DOCUMENT TYPE: PATENT INFORMATION: English Patent

NUMBER KIND DATE ______ A1 19961212 WO 9639161

DESIGNATED STATES

AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL

PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

APPLICATION INFO .:

PRIORITY INFO.:

WO 1996-US8437 US 1995-8/462,223 A 19960603 19950605

ANSWER 2 OF 8 ACCESSION NUMBER:

TITLE (ENGLISH):

COPYRIGHT 2006 Univentio on STN PCTFULL

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

1.994023724 PCTFULL ED 20020513 MEMBRANE-PERMEANT SECOND MESSENGERS

MESSAGERS SECONDAIRES S'INFILTRANT DANS LA MEMBRANE TITLE (FRENCH):

CELLULAIRE

INVENTOR(S):

TSIEN, Roger, Y.; SCHULTZ, Carsten

PATENT ASSIGNEE(S): LANGUAGE OF PUBL.:

English

DOCUMENT TYPE: PATENT INFORMATION: Patent

NUMBER KIND DATE

WO 9423724

Al 19941027

DESIGNATED STATES

AU BB BG BR BY CA CN CZ FI HU JP KP KR KZ LK LV MG MN MW NO NZ PL RO RU SD SI SK UA UZ VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN

ML MR NE SN TD TG

APPLICATION INFO .: PRIORITY INFO.:

A 19940408 WO 1994-US3889 19930409 US 1993-45,585

L35ANSWER 3 OF 8

ACCESSION NUMBER:

COPYRIGHT 2006 Univentio on STN PCTFULL 1994022444 PCTFULL ED 20020513

TITLE (ENGLISH): TITLE (FRENCH):

TRICYCLIC COMPOUNDS FOR INHIBITING PLATELET AGGREGATION

COMPOSES TRICYCLIQUES UTILISES POUR INHIBER

L'AGREGATION PLAQUETTAIRE CALLAHAN, James, Francis; INVENTOR(S):

HUFFMAN, William, F.

SMITHKLINE BEECHAM CORPORATION; PATENT ASSIGNEE(S):

CALLAHAN, James, Francis;

HUFFMAN, William, F.

LANGUAGE OF PUBL .: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE ______

WO 9422444

A1 19941013

DESIGNATED STATES

W:

JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO .: WO 1994-US3383 A 19940329 PRIORITY INFO.: US 1993-8/038,382 19930329

ANSWER 4 OF 8 L35

ACCESSION NUMBER: TITLE (ENGLISH):

PCTFULL COPYRIGHT 2006 Univentio on STN 1993008842 PCTFULL ED 20020513

HEMOGLOBINS AS DRUG DELIVERY AGENTS

TITLE (FRENCH): HEMOGLOBINES UTILISEES COMME AGENTS ADMINISTRATEURS DE

MEDICAMENTS

Patent

INVENTOR(S):

ANDERSON, David, C.; MATHEWS, Antony, James SOMATOGEN, INC.;

PATENT ASSIGNEE(S):

ANDERSON, David, C.; MATHEWS, Antony, James English

LANGUAGE OF PUBL.:

DOCUMENT TYPE:

PATENT INFORMATION:

NUMBER KIND DATE

______ WO 9308842 A1 19930513

DESIGNATED STATES

W:

AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE UA US AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE BF BJ CF CG CI CM GA GN

ML MR SN TD TG

APPLICATION INFO .: PRIORITY INFO.:

WO 1992-US9713 A 19921106 19911108 US 1991-789,177 US 1991-789,179 19911108

L35 ANSWER 5 OF 8

ACCESSION NUMBER: TITLE (ENGLISH): TITLE (FRENCH):

PCTFULL COPYRIGHT 2006 Univentio on STN

1993000095 PCTFULL ED 20020513 BICYCLIC FIBRINOGEN ANTAGONISTS

ANTAGONISTES BICYCLIQUES DE FIBRINOGENE INVENTOR(S):

BONDINELL, William, Edward; CALLAHAN, James, Francis; HUFFMAN, William, Francis; KEENAN, Richard, McCulloch;

KU, Thomas, Wen-Fu;

NEWLANDER, Kenneth, Allen

PATENT ASSIGNEE(S):

SMITHKLINE BEECHAM CORPORATION; BONDINELL, William, Edward;

CALLAHAN, James, Francis; HUFFMAN, William, Francis; KEENAN, Richard, McCulloch;

KU, Thomas, Wen-Fu;

NEWLANDER, Kenneth, Allen

LANGUAGE OF PUBL.:

DOCUMENT TYPE:

English Patent

PATENT INFORMATION: KIND DATE NUMBER

WO 9300095

A2 19930107

DESIGNATED STATES

W:

AU CA JP KR US AT BE CH DE DK ES FR GB GR IT LU MC NL

SE

APPLICATION INFO.:

WO 1992-US5463

A 19920626

PRIORITY INFO.: US 1991-723,009 19910628

L35 ANSWER 6 OF 8 PCTFULL COPYRIGHT 2006 Univentio on STN ACCESSION NUMBER: 1991019733 PCTFULL ED 20020513

TITLE (ENGLISH): DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS
TITLE (FRENCH): DERIVES DE TETRAPEPTIDES EN TANT QU'AGONISTES DE

CHOLECYSTOKININE
INVENTOR(S):
SHIOSAKI, Kazumi;
NADZAN, Alex, M.;
KOPECKA, Hana;
SHUE, Youe-Kona;

HOLLADAY, Mark, W.; LIN, Chun, W.; NELLANS, Hugh, N.

PATENT ASSIGNEE(S): ABBOTT LABORATORIES

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 9119733 A1 19911226
DESIGNATED STATES

W: AT BE CA CH DE DK ES FR GB GR IT JP LU NL SE

APPLICATION INFO.: WO 1991-US4458 A 19910620 PRIORITY INFO.: US 1990-541,230 19900620 US 1991-713,010 19910614

L35 ANSWER 7 OF 8 PCTFULL COPYRIGHT 2006 Univentio on STN ACCESSION NUMBER: 1990006937 PCTFULL ED 20020513

TITLE (ENGLISH): DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS
TITLE (FRENCH): DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS

REPRODUISANT L'ACTIVITE DE LA CCK

INVENTOR(S): SHIOSAKI, Kazumi; NADZAN, Alex, M.;

KOPECKA, Hana; SHUE, Youe-Kong ABBOTT LABORATORIES;

PATENT ASSIGNEE(S): ABBOTT LABORATORIES;

SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 9006937 A1 19900628

DESIGNATED STATES

W: BE CH DE ES FR GB IT JP NL SE US

W: BE CH DE ES FR GB IT JP NL SE US
APPLICATION INFO.: WO 1989-US5673 A 19891218
PRIORITY INFO.: US 1988-287,955 19881221

PLAQUETTES

L35 ANSWER 8 OF 8 PCTFULL COPYRIGHT 2006 Univentio on STN ACCESSION NUMBER: 1990006128 PCTFULL ED 20020513

TITLE (ENGLISH): METHODS AND COMPOSITIONS FOR INHIBITING PLATELET

AGGREGATION
TITLE (FRENCH): METHODES ET COMPOSITIONS POUR INHIBER L'AGREGATION DES

INVENTOR(S): MARAGANORE, John, M.;
JAKUBOWSKI, Joseph, A.

PATENT ASSIGNEE(S): BIOGEN, INC.;

TRUSTEES OF BOSTON UNIVERSITY

LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER KIND DATE _____ WO 9006128 Al 19900614 DESIGNATED STATES DK FI HU JP KR NO W: APPLICATION INFO.: WO 1989-US849 A 19890302 PRIORITY INFO.: US 1988-280,618 19881205 => s 135 and cck 2003 CCK 36 CCKS 2007 CCK (CCK OR CCKS) 5 L35 AND CCK L36 => d ibib 1-5PCTFULL COPYRIGHT 2006 Univentio on STN L36 ANSWER 1 OF 5 1996039161 PCTFULL ED 20020514 ACCESSION NUMBER: TITLE (ENGLISH): MULTI-TYROSINATED SOMATOSTATIN ANALOGS ANALOGUES DE LA SOMATOSTATINE CONTENANT PLUSIEURS DE TITLE (FRENCH): TYROSINES INVENTOR(S): COY, David, H.; WOLTERING, Eugene, A.; O'DORISIO, M., Sue; O'DORISIO, Thomas, M.; MURPHY, William, A. PATENT ASSIGNEE(S): THE ADMINISTRATORS OF THE TULANE EDUCATIONAL FUND ; THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION; THE LOUISIANA STATE UNIVERSITY MEDICAL CENTER FOUNDATION; CHILDREN'S HOSPITAL, INC. LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent PATENT INFORMATION: NUMBER KIND DATE _____ WO 9639161 A1 19961212 DESIGNATED STATES AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI W:GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG APPLICATION INFO.: A 19960603 WO 1996-US8437 PRIORITY INFO.: US 1995-8/462,223 19950605 L36 ANSWER 2 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN 1994023724 PCTFULL ED 20020513 ACCESSION NUMBER: MEMBRANE-PERMEANT SECOND MESSENGERS

TITLE (ENGLISH): MESSAGERS SECONDAIRES S'INFILTRANT DANS LA MEMBRANE TITLE (FRENCH):

CELLULAIRE INVENTOR(S):

TSIEN, Roger, Y.; SCHULTZ, Carsten

PATENT ASSIGNEE(S): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent PATENT INFORMATION:

> NUMBER KIND DATE ______ WO 9423724 A1 19941027

DESIGNATED STATES

W: AU BB BG BR BY CA CN CZ FI HU JP KP KR KZ LK LV MG MN

MW NO NZ PL RO RU SD SI SK UA UZ VN AT BE CH DE DK ES . FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG APPLICATION INFO.: WO 1994-US3889 A 19940408 US 1993-45,585 19930409 PRIORITY INFO.: ANSWER 3 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN ACCESSION NUMBER: 1993008842 PCTFULL ED 20020513 HEMOGLOBINS AS DRUG DELIVERY AGENTS TITLE (ENGLISH): HEMOGLOBINES UTILISEES COMME AGENTS ADMINISTRATEURS DE **MEDICAMENTS** ANDERSON, David, C.; MATHEWS, Antony, James PATENT ASSIGNEE(S): SOMATOGEN, INC.; ANDERSON, David, C.; MATHEWS, Antony, James LANGUAGE OF PUBL.: English Patent PATENT INFORMATION: NUMBER KIND DATE _____ WO 9308842 A1 19930513 DESIGNATED STATES AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE UA US AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE BF BJ CF CG CI CM GA GN ML MR SN TD TG WO 1992-US9713 A 19921106 APPLICATION INFO.: US 1991-789,177 19911108 US 1991-789,179 19911108 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 4 OF 5 ACCESSION NUMBER: . 1991019733 PCTFULL ED 20020513 DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS TITLE (ENGLISH): DERIVES DE TETRAPEPTIDES EN TANT QU'AGONISTES DE CHOLECYSTOKININE SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kona; HOLLADAY, Mark, W.; LIN, Chun, W.; NELLANS, Hugh, N. ABBOTT LABORATORIES PATENT ASSIGNEE(S): LANGUAGE OF PUBL.: English Patent PATENT INFORMATION: NUMBER KIND DATE WO 9119733 A1 19911226 DESIGNATED STATES AT BE CA CH DE DK ES FR GB GR IT JP LU NL SE WO 1991-US4458 A 19910620 APPLICATION INFO.: US 1990-541,230 19900620 US 1991-713,010 19910614 PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 5 OF 5 ACCESSION NUMBER: 1990006937 PCTFULL ED 20020513 DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS TITLE (ENGLISH): DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS REPRODUISANT L'ACTIVITE DE LA CCK SHIOSAKI, Kazumi;

TITLE (FRENCH):

INVENTOR(S):

DOCUMENT TYPE:

W:

PRIORITY INFO.:

TITLE (FRENCH):

INVENTOR(S):

DOCUMENT TYPE:

W:

PRIORITY INFO.:

TITLE (FRENCH):

NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

INVENTOR(S):

L36

PATENT ASSIGNEE(S): ABBOTT LABORATORIES;

SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE WO 9006937 A1 19900628

DESIGNATED STATES

W:

BE CH DE ES FR GB IT JP NL SE US APPLICATION INFO .: WO 1989-US5673 A 19891218 PRIORITY INFO.: US 1988-287,955 19881221

=> d ibib kwic 5

ANSWER 5 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

1990006937 PCTFULL ED 20020513 ACCESSION NUMBER:

DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS TITLE (ENGLISH): DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS TITLE (FRENCH):

REPRODUISANT L'ACTIVITE DE LA CCK

INVENTOR(S): SHIOSAKI, Kazumi;

NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

ABBOTT LABORATORIES; PATENT ASSIGNEE(S):

SHIOSAKI, Kazumi; NADZAN, Alex, M.; KOPECKA, Hana; SHUE, Youe-Kong

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

KIND NUMBER ______ WO 9006937 A1 19900628

DESIGNATED STATES

APPLICATION INFO.:

PRIORITY INFO.:

W:

BE CH DE ES FR GB IT JP NL SE US WO 1989-US5673 A 19891218 US 1988-287,955

DERIVATIVES OF TETRAPEPTIDES AS CCK AGONISTS

DERIVES DE TETRAPEPTIDES UTILISES COMME AGENTS REPRODUISANT L'ACTIVITE TIFR

ABEN Tetrapeptide analogs are disclosed which possess CCK agonist activity.

Les analogues de tetrapeptides decrits possedent une activite similaire ABFR a la cholecystokinine (CCK).

DETD DERTVATIVES OF-TETRAPEPTIDES AS CCK AGONISTS This is a continuation-in-part of U.S. Patent Application Serial No. 287,955, filed December 21, 1988.

Technical Field

The present invention relates to novel organic compounds and compositions which mimic the effects of cholecystokinin, caerulein and gastrin, processes for making such compounds, synthetic intermediates employed in these processes and a method for treating gastrointestinal disorders, central nervous.

Backaround of thp Tnvention

Cholecystokinin (CCK) is a 39 amino acid polypeptide hormone. CCK and a 33 amino acid fragment of CCK (CCK 33)

were first isolated from hog intestine (Mutt and jorpes, Biochem.]L, 12, Ij 628 (1981)). Recently the CCK 33 fragment has been found in the brain, where it appears to be the precursor of two smaller fragments, an octapeptide CC]K8 and a tetrapeptide CCK 4 (Dockray, Nature 264 402 (1979)).

Existence of these fragments in the cortex of the brain suggests that CCK may be an important neuromodulator of memory, learning and control of the primary sensory and motor functions. CCK and it-s fragments are believed to play an important role in appetite regulation and satiety (Della-Ferat Science 206 471 (1979); Saito et. . . Eating and it-s Disorders, eds.,

Raven Pressr New Yorkf 67 (1984)). Recently,, patients with bulimia were shown to have lower than normal CCK levels in their plasma-(Geracioti, et al., New England Journal of Medici=, 3_12 683 (1988)). An additional role for CCK in the periphery is to regulate the release of insulin., CCK has been shown to increase the levels of insulin when administered to mammals (Rushakoff, et al., J. Clin. Endocrinol, Metab. 65 395. . .

C-terminal fragments of CCK have recently been reported to function as CCK receptor antagonists (Jensen et al Biochem. Biophys. Acta, 757, 250 (1983); Spanarkel, J. Biol. Chem. ZUt 6746 (1983)). Japanese patent application 45/10506 to. . .

In contrast, the present invention relates to tetrapeptide analogs-which function as agonists of CCK activity, CCK agonists are useful in the treatment and prevention of CCK-related disorders of the gastrointestinal, appetite (obesity and bulimia, among others) and insulin regulatory systems of animals, especially man. CCK agonists are also useful as central nervous system suppressants which can exhibit antipsychotic, neuroleptic, anxiolytic, and anti-convulsant effects, among other effects on. . .

the Drawinas

Figure I is a plot comparing the mean level of liquid food intake (mls) for rats after chronic administration of vehicle, CCK-8 (10 nmol/kg), or the compound of Example

180 (l nmol/kg or 10 nm/kg).

Figure 2 is a plot comparing the mean change in body weight (grams) for rats after chronic administration of vehicle, CCK-8 (10 nmol/kg), or the compound of Example 180 (1 nmol/kg or 10 nm/kg), Summary of the Invention

In accordance with the present invention there are cholecystokinin agonists of the formula.

IL 1981, p 617)

wherein the Boc or Cbz protected amino acid is treated with a base in the presence of a chelating agent such as a crown ether and then quenched with methyl iodide.

found: C 61.11r H 6.50F. N 10.89, The compounds of formula I are CCKagonists which are useful in the treatment and prevention of CCK-related disorders of the gastrointestinal, central nervous, and appetite and insulin regulatory systems of animals and humans. As CCK agonists, they are useful in the treatment and prevention of neuroleptic disorders, tardive dyskinesiat disorders of memory and cognition, Parkinson's disease, Huntington's chorea, . .

The ability of the compounds of the invention to interact with CCK receptors and to act as CCK agonists can be demonstrated ja vitro using the following protocols.

CCK8 [Asp-Tyr(SO 3H)-Met-Gly-Trp-Met-Asp-Phe-NH2], bestatin and phosphoramidon were purchased from Peptide International (Louisville, KY), EGTAr HEPES and BSA were purchased from Sigma Chemical Co.

(St. Louis,, MO), 125 11 - Bolton-Hunter (BH-CCK (specific activity, 2200 Ci/mmol) was obtained from New England Nuclear (Boston, MA). Male guinea pigs, 250 to 32S g, were obtained from Scientific Small Animal Laboratory and Farm (Arlington Heights, IL). Collagenase, code CLSPA was purchased from Worthington (Frehold, New Jersey) Protocol For Radioligand Binding Experiments in Guinea Pig Cerebral Cortical and Pancreatic Membrane PreT) arations Cortical and pancreatic membranes were prepared as described (Lin and Miller; J, Pharmacol,. . .

Incubation Conditions
1 125 I]Bolton-Hu-nter CCK and test compounds were
8

diluted with HEPES-EGTA-salt buffer (see above) containing 0.5% bovine serum albumin (BSA). To 1 mL Skatron polystyrene tubes were added 25 uL of test compounds, 25 uL of [125 IJBH-CCK and 200 uL of membrane suspension. The 8 $\,$

final BSA concentration was 0.1%. The cortical tissues were incubated at 300C for 150 min. . . . 37°C for 150 min. Incubations were

terminated by filtration using Skatron Cell Harvester and SS32 microfiber filter mats. The specific binding of 125

I IIBH-CCK 8. defined as the difference between binding in

the absence and presence of 1 uM CCK., was 85-90% of total binding in cortex and 90-95% in pancreas. IC 50 s were determined from the Hill analysis. The results. . .

Table 1
125 laaQ7'Q'L125
Compound of I-BH-CCK 8 I-BH-CCK8
Example Pancreas Cortex
30 270
12 680
10 732
26 238
71 1480
26 1800
32 114
45 35 4700
4 7 50 4 000
4 9 4 1 815

The results indicate that compounds of the invention possess selective affinity for the pancreatic CCK receptors.

Amylase Assay

After the 30 min incubation time, the acini was resuspended in 100 volumes of KRH-BSA buffer, containing 3 uM phosphoramidon and 100 uM bestatin. While stirring, 400 uL of acini were added to 1.5 mL microcentrifuge tubes containing 50 uL of CCK., buffer, or test compounds. The final assay volume was 500 uL. Tubes were vortexed and placed in a 37'C waterbathf under 100%. . .

TABLE 2
Cgmipound of Example Amylase rele=r.---M.4aIIL
5
3
40
80
24
157 ill
180 0.74
The results indicate that compounds of the invention are CCK agonists.

Measurement of PlasMa Insulin in Mice Following Treatment With CCK or a CCK Aaonist
Male mice, 20-30 g. were used in all experiments. The animals were fed with laboratory lab chow and water ad libitum. CCK8 or the CCK agonist compound of this invention was injected into the tail vein. Two minutes later, the animals were sacrificed and the blood was collected.

10,000 x g for 2 minutes. The insulin levels were determined in the supernatant, i,e,, plasma, by RIA using kits obtained from Radioassay Systems Laboratory (Carson, CA.) or Novo Biolabs (Danbury, CT.).

Agonists On Insulin Secretion in Nice % Increase In Insulin Dose Secretion versus Com-pound of Examr)le (nmole/kcr)]alinC Control 157 10 41 100 112 180 100 238 CCK8 3 65 10 85 30 90 100 70 The results indicate that compounds of the invention stimulate insulin secretion in yjy.Q.

CCK8 3.0 nmol/mouse 106 10.0 nmol/mouse 157 30.0 nmol/mouse 180 1.0 nmol/mouse The results of these tests indicate that compounds of the invention suppress locomotor activity. food intake. Five minutes prior to their one hour free feeding (Purina Rat Chow), the animals were injected (i,p,) with either vehicle, CCK the compound of Example 106. The amount of food consumed was measured after subtraction of spillage. The results of this test are. AdMinistration of CCK Agonists Compound Dose Mean Food Intake vehicle ... 9,40 grams C-CK 20 ug/kg 6.56 grams Example 106 1,0 mg/kg 3.49 grams Example 106 3.0 mg/kg. When a compound of formula I is used as an agonist of CCK or gastrin in a human subject, the total daily dose administered in single or divided doses may be in amounts, for example,. CLMEN 5 A method for mimicking the effects of CCK on CCK receptors comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of Claim 1, 7 A CCK agonist composition comprising a pharmaceutical carrier and a therapeutically effective amount of a compound of Claim 1. => s CCK and (DOTA or DTPA) 2003 CCK 36 CCKS 2007 CCK (CCK OR CCKS) 1767 DOTA 5 DOTAS 1768 DOTA (DOTA OR DOTAS) 5576 DTPA 12 DTPAS 5579 DTPA (DTPA OR DTPAS) 79 CCK AND (DOTA OR DTPA) => s 137 not py>1996 935225 PY>1996 5 L37 NOT PY>1996

=> d ibib kwic 1-5

L37

L38

COPYRIGHT 2006 Univentio on STN L38 ANSWER 1 OF 5 PCTFULL ACCESSION NUMBER: 1996005861 PCTFULL ED 20020514 TITLE (ENGLISH): COMPOSITIONS AND METHODS FOR THE TREATMENT OF BODY WEIGHT DISORDERS, INCLUDING OBESITY COMPOSITIONS ET PROCEDES DE TRAITEMENT DES TROUBLES TITLE (FRENCH): INHERENTS AU POIDS CORPOREL, DONT L'OBESITE

INVENTOR(S): TARTAGLIA, Louis, A.

MILLENIUM PHARMACEUTICALS, INC. PATENT ASSIGNEE(S):

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND WO 9605861 A1 19960229

DESIGNATED STATES

W: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT

WO 1995-US10918 A 19950823 APPLICATION INFO .: 19940823 PRIORITY INFO.: US 1994-294,522 19950606 US 1995-470,868

DETD . . These include but are not limited to the intracellular domain of receptors for such hormones as neuropeptide Y, galanin, interostatin, insulin, and CCK. Total genomic or cDNA sequences are fused to the DNA encoding an activation domain. This library and a plasmid encoding a hybrid of.

Eu, or others of the lanthanide series. These metals can be attached to the antibody using such metal chelating groups as diethylenetriaminepentacetic acid (DTPA) or ethylenediaminetetraacetic acid (EDTA).

PCTFULL COPYRIGHT 2006 Univentio on STN ANSWER 2 OF 5 L38

1995024426 PCTFULL ED 20020514 ACCESSION NUMBER:

A NOVEL EXPRESSION-CLONING METHOD FOR IDENTIFYING TITLE (ENGLISH):

TARGET PROTEINS FOR EUKARYOTIC TYROSINE KINASES AND

NOVEL TARGET PROTEINS

NOUVEAU PROCEDE D'EXPRESSION-CLONAGE UTILISE POUR TITLE (FRENCH):

IDENTIFIER DES PROTEINES A CIBLES DES TIROSINE-KINASES

EUKARYOTES, ET NOUVELLES PROTEINES CIBLES

SCHLESSINGER, Joseph; INVENTOR(S):

SKOLNIK, Edward, Y.; MARGOLIS, Benjamin, L. NEW YORK UNIVERSITY

PATENT ASSIGNEE(S):

LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

KIND NUMBER WO 9524426 A1 19950914

DESIGNATED STATES

AM AU BB BG BR BY CA CN CZ EE FI GE HU JP KE KG KR KZ W :

LK LR LT LV MD MG MN MW MX NO NZ PL RO RU SD SG SI SK TJ TT UA UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR

NE SN TD TG

APPLICATION INFO.: WO 1995-US3385 A 19950313

PRIORITY INFO.: US 1994-208,887 19940311

. lanthanide series. These metals can be attached to the DETD peptide probe or anti-target protein antibody using such metal chelating groups as diethylenetriaminepentaacetic acid (DTPA) or ethylenediaminetetraacetic acid (EDTA).

> know how to vary the aonrorrlate is parameters without undue ex-oerimentation. Furthermore, general methods in this area are set- forth in Sa:L=cck et al - (sunra)

Materials of which solid phase carrier can be made include, but are not limited to, nitrocellulose,

cellulose, paner, substituted polystyrenes, acrylonitriles,.

L38 ANSWER 3 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1995024225 PCTFULL ED 20020514

TITLE (ENGLISH): TITLE (FRENCH):

INVENTOR(S):

POLYCHELANTS POLYCHELATEURS MARGERUM, Lawrence; CARVALHO, Joan; GARRITY, Martha;

FELLMANN, Jere, Douglas

PATENT ASSIGNEE(S): NYCOMED SALUTAR, INC.;

COCKBAIN, Julian, Roderick, Michaelson;

MARGERUM, Lawrence; CARVALHO, Joan; GARRITY, Martha;

FELLMANN, Jere, Douglas

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND

WO 9524225

A1 19950914

DATE

DESIGNATED STATES

AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK TJ TT UA UG US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN'TD TG

APPLICATION INFO.: PRIORITY INFO.:

WO 1995-GB464 A 19950303 GB 1994-9404208.2 19940304

Thus, Krejcarek et al (supra) disclosed how polyaminopolycarboxylic acid (PAPCA) chelants, specifically DTPA (diethylenetriaminepentaacetic acid) could be conjugated to a protein, such as human serum. albumin (HSA), by reaction of the triethylamine salt of the PAPCA.

> Unger et al. in Investigative Radiology 20:693 (1985) analyzed tumor enhancement for magnetic resonance imaging using an anti-CEA monoclonal antibody conjugated with Gd-DTPA. They found no tumor enhancement when 4 Gd atoms were bound per antibody molecule, and predicted that a far greater ratio of.

Thus Hnatowich et al, (supra) used the cyclic anhydride of the chelant DTPA to attach it to a protein.

has thus been used to produce bifunctional polychelants in which the chelant moieties are residues of open chain PAPCAs, such as EDTA and DTPA, and in which the backbone molecule is a polyamine such as polylysine or polyethyleneimine.

Thus for example Manabe et al. in Biochemica et Biophysica Acta 883: 460-467 (1986) reported attaching up to 105 DTPA residues onto a poly-L-lysine backbone using the cyclic anhydride method and also attaching polylysine-polyDTPA polychelants onto monoclonal antibody (anti-HLA IgGj) using a 2-pyridyl disulphide linker achieving a substitution of up to about 42.5 chelants (DTPA resi]_-:-.-]s) per site-specific macromolecule. Torcrilin et al. in Hybridoma 6:229-240 (1987) also reported attaching DTPA and EDTA to

polyethyleneimine and polylysine backbones which were then attached to a myosin-specific monoclonal antibody, or its Fab fragment, to produce bifunctional polychelants. . .

chelant moieties in the polychelants of the invention may be residues of any of the conventional macrocyclic chelants such as for example DOTA, TETA, D03A. etc, The macrocyclic skeleton, as mentioned above, preferably has 9 to 25 ring members and conveniently is an optionally oxygen or. . . pendent groups which participate in metal chelation, for example C1-6alkyl groups carrying hydroxyl, amino, phosphonate, or phosphinate or more preferably carboxyl groups. D03A and DOTA derived macrocycles are especially preferred, i.e. groups of formula HOOC--\F-] X]--COOH HOOC--\F7 /-COOH
N N-] and [-N
EN N N N

Exemplary polyazacycloalkanepolycarboxylates include 1 7,10-tetraazacyclododecanetetraacetic acid (DOTA), 1,4,7,10-tetraazacyclododecane 4,7-triacetic acid (DO3A), 1-oxa-4,7,10-triazacyclododecanetriacetic acid (DOXA), 1,4,7-triazacyclononanetriacetic acid (NOTA) and 1 8,11-tetraazacyclotetradecanetetraacetic acid (TETA), Additionally, the novel tetraazacycloalkanepolycarboxylates, DOTA-N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide are also contemplated, The preparation of the tetraazacycloalkanepolycarboxylate ligands is well known. Synthesis of DOTA is described in U.S. Patent No. 4,647,447 (Gries et al.), U.S. Patent No, 4,639,365 (Sherry) and by Desreux et al.

in Inorg. Chem. 19:1319 (1980). Additionally, DOTA is available commercially from Parish Chemical Co,, Orem, UT, USA. Preparation of DO3A is described in EP-A-292689 (Squibb). Desreux, Inorg. Chem., 19:1319. . . al, Inorg. Chem., 26:3458 (1987) and Meares et al, Acc. Chem. Res., 17:202 (1984) describe the properties and chemistry of the macrocyclic ligands DOTA, NOTA, TETA and their backbone-derivatized analogues, including the preparation of NOTA and TETA.

U.S. Patent No, 4,678,667 (Meares et al.) teaches the preparation of a number of macrocyclic, side chain-derivatized ligands including DOTA and TETA.

Derivatization of DOTA to form DOTA -N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide is described in detail hereinafter in Examples 2 and 3, respectively, The above cited references and all other references mentioned herein are hereby. . .

be taken with the lanthanide ions to maintain the pH below 8 to avoid precipitation of the metal hydroxide. Metal incorporation into DOTA derived and related macrocylic chelant moieties will normally be a slow process, as described in the references cited below. Specific examples of the. . .

Med., 3:808 (1986) and WO-A-87/06229 describe

incorporation of Gd(III) into DOTA. A method of preparing Bi and Pb complexes of DOTA is described by Kumar et al, J. Chem. Soc. Chem. Commun., 3:145 (1989).

reduction of 99Tc with Sn in the presence of a weakly coordinating ligand such as glucoheptonate prior to complexation with chelants such as DOTA. These methods are well known in the radiopharmaceutical art 67CU utilizes tetraamine chelates such as tet A or tet B (see Bhardaredj. . .

CCK and hexapeptides), proteins (such as lectins, asialofetuin, polyclonal IgG, blood clotting proteins (e.g. hirudin), lipoproteins and glycoproteins), hormones, growth factors, and clotting factors. . .

In general, known methods can be used to join the macrocyclic chelants to backbone molecules. While for preferred macrocyclic chelants, such as DOTA, the conventional mixed anhydride and cyclic anhydride conjugation techniques are ineffective, it has been found that modifying the mixed anhydride procedure by reacting a polycarboxylic. . .

For macrocycles with a pendant carboxylate, including but not limited to DOTA, TETA, TRITA (1,4,7,10-tetraazacyclotridecanetetraacetic acid) and NOTA, one of the carboxylates can form an entity which can react with a primary amine group. . .

linked to a

backbone molecule through a non-coordinating primary amine group. Macrocyclic chelants having a non-coordinating primary amine group include primary amine side-chain-derivatized DOTA macrocycles, primary amine-derivatized DO3A, and primary amine-derivatized hexaaza and octaaza macrocycles and macrobicycles (the HAMs.

for example, physiologically biocompatible buffers (as for example, tromethamine hydrochloride), additions (e,g,, 0.01 to 10 mole percent) of chelants (such as, for example, DTPA, DTPA

bisamide or non-complexed magnifier polychelant) or calcium chelate complexes (as for example calcium DTPA, CaNaDTPA-bisamide, calcium-magnifier polychelant or CaNa salts of magnifier polychelants), or, optionally, additions (e.g., 1 to 50 mole percent) of calcium or sodium salts (for. . .

L38 ANSWER 4 OF 5 ACCESSION NUMBER: TITLE (ENGLISH):

TITLE (FRENCH):

INVENTOR(S):

PATENT ASSIGNEE(S): DOCUMENT TYPE: PATENT INFORMATION: PCTFULL COPYRIGHT 2006 Univentio on STN

1995005842 PCTFULL ED 20020514

METHOD AND DEVICE FOR TREATING GASTROINTESTINAL MUSCLE

DISORDERS AND OTHER SMOOTH MUSCLE DYSFUNCTION PROCEDE ET DISPOSITIF POUR TRAITER LES TROUBLES

MUSCULAIRES GASTRO-INTESTINAUX ET AUTRES DYSFONCTIONNEMENTS DES MUSCLES LISSES

PASRICHA, Pankaj, J.; KALLOO, Anthony, N.

THE JOHNS HOPKINS UNIVERSITY

Patent

NUMBER KIND DATE
----WO 9505842 A1 19950302

DESIGNATED STATES

W:

CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO .:

WO 1994-US9759

A 19940823

PRIORITY INFO.:

US 1993-112,088

19930826

Figs. 3A and B show the effect of intrasphincteric injection of BoTx on LES response to cholecystokinin octapeptide (CCK)

response of the LES to the IV administration of edrophonium (Tensilon; ICN Pharmaceuticals Inc., Costa Mesa, CA) and cholecystokinin octapeptide (CCK-8) (Kinevac; ER Squibb amp; Sons, Princeton, NJ) in three

additional piglets was also measured. LES pressures, measured by a DENTSLEEVE, were recorded in response to IV edrophonium (5 mg). After a SUBSTITUTE SHEET (RULE 26)

washout period of 10 minutes, CCK (5 µ g IV) was then administered.

Subsequently, BoTx was injected into the LES, as described above, and

experiment was. .

Intrasphincteric BoTx also altered the response of the LES to

(Figure 3). In untreated piglets, CCK did not cause any significant change in

LES pressure. However, after intrasphincteric BoTx injection, a significant

increase in LES pressure was seen in response to CCK. It should be noted that

despite what was felt to be an adequate washout period (10 minutes) in between

injections, basal. .

retention studies

After an overnight fast, patients were asked to ingest a corn-flake meal with milk containing 0.531 mci 99 aiTc DTPA. Subsequently, serial dynamic

images were obtained with the subject sitting erect in front of a gamma camera.

Retention was expressed. .

ANSWER 5 OF 5

PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER:

1993006868 PCTFULL ED 20020513 DENDRIMERIC POLYCHELANTS

TITLE (ENGLISH):

POLYCHELATEURS DENDRIMERES

TITLE (FRENCH):

INVENTOR(S):

WATSON, Alan, D.

PATENT ASSIGNEE(S):

COCKBAIN, Jilian, Roderick, Michaelson;

NYCOMED SALUTAR, INC.;

WATSON, Alan, D.

LANGUAGE OF PUBL.:

English

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER ______

KIND DATE

WO 9306868

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. chelates which are useful in diagnostic imaging

and in radiotherapy and which comprise a plurality of macrocyclic chelant moieties, e.g. DOTA

residues, conjugated to an up to fifth generation dendrimer backbone

molecule, e.g. a starburst
dendrimer. To produce a site-specific polychelate,.
 . utilises dans l'imagerie diagnostique et en

ABFR . . . utilises dans l'imagerie diagnostique et en radiotherapie. Ils comportent une pluralite de fractions de chelateurs macrocycliques, par exemple

des restes DOTA, conjugues a une molecule de squelette dendrimere dont la generation va jusqu'a la cinquieme, par exemple un dendrimere en etoile.. . .

DETD . . . paramagnetic metal ion chelates of bifunctional chelants for use as MRI contrast agents,

Thus, Krejcarek et al (supra) disclosed how polyaminopolycarboxylic acid (PAPCA) chelants, specifically DTPA (diethylepetriaminepentaacetic acid) could be conjugated to a protein, such as human serum albumin (HSA), by reaction of the triethylamine salt of the PAPCA. . .

152:571 (1988))e

Unger et al, in Investigative Radiology 20:693 (1985) analyzed tumor enhancement for magnetic resonance imaging using an anti-CEA monoclonal antibody conjugated with Gd-DTPA* They found no tumor enhancement when 4 Gd atoms were bound per antibody molecule, and predicted that a far greater ratio of. . .

Thus Hnatowich et al, (supra) used the cyclic anhydride of the chelant DTPA to attach it to a protein, This, is a relatively simple one-step synthesis procedure which as a result has been used by. . .

has

thus been used to produce bifunctional polychelants in which the chelant moieties are residues of open chain PAPCAs,, such as EDTA and DTPA,, and in which the backbone molecule is a polyamine such as polylysine or polyethyleneimine. Thus for example Manabe et al, in Biochemica. et Biophysica Acta 883: 460-467 (1986) reported attaching up to 105 DTPA residues onto a poly-L-lysine backbone using the cyclic anhydride method and also attaching polylysine-polyDTPA polychelants onto monoclonal antibody (anti-HLA IgGj) using a 2-pyridyl disulphide linker achieving a substitution of up to about 42,5 chelants (DTPA residues) per site-specific macromolecule. Torchlin et al. in Hybridoma 6:229-240 (1987) also reported attaching DTPA and EDTA to polyethyleneimine and polylysine backbones which were then attached to a myosin-specific monoclonal antibody, or its Fab fragment, to produce bifunctional polychelants.

diagnosis and therapy, due in part to their unique localization in the body, The monomeric chelates presently used for MRI contrast enhancement (e.g., Gd(DTPA)2-,, Gd(DOTA)'-) have in vivo applications related to their specific, rapid biodistribution, localizing these chelates in the extravascularl extracellular spaces of the body. The size. . .

Exemplary polyazacycloalkanepolycarboxylates include 1,4,7,10-tetraazacyclododecanetetraacetic acid (DOTA), 1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid (DO3A), I-oxa-4,7,10-triazacyclododecanetriacetic

acid (DOXA), 1.4,7-triazacyclononanetriacetic acid (NOTA) and 1.4,8,11-tetraazacyclotetradecanetetraacetic acid (TETA), Additionally, the novel - tetraazacycloalkanepolycarboxylates, DOTA-N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide are also contemplated.

The preparation of, the tetraazacycloalkanepolycarboxylate ligands is well known. Synthesis of DOTA is described in U.S. Patent No. 4,647,447 (Gries et al.), U.S, Patent No, 4,639,365 (Sherry) and by Desreux et al, in Inorg. Chem, .19:1319 (1980). Additionally, DOTA is available commercially from Parrish Chemical Co,, Orem, UT, USA. Preparation of DO3A is described in EP-A-292689 (Squibb). Desreux, Inorq. Chem,, 19:1319. . . et al, Inorg, Chem, 26:3458 (1987) and Meares et al, Acc, Chem, Res,, 17:202 (1984) describe the properties and chemistry of the macrocyclic ligands DOTA, NOTA, TETA and their backbone-derivatized analogues, including the preparation of NOTA and TETA, U.S. Patent No. 4,678,667 (Meares et al,) teaches the preparation of a number of macrocyclic, side chainderivatized ligands including DOTA and TETA, Derivatization of DOTA to form DOTA -N(2-aminoethyl)amide and DOTA-N(4-aminophenethyl)amide is described in detail hereinafter in Examples 2 and 3, respectively. The above cited references and all other references mentioned herein are hereby.

acids, oligopeptides (e.g. hexapeptides), molecular recognition units (MRU's), single chain antibodies (SCA's), proteins, Fab fragments, and antibodies. Examples of site-directed molecules include polysaccharides (e,g, CCK and hexapeptides), proteins (such as lectins, asialofetuin, polyclonal IgG, blood clotting proteins (e.g. hirudin), lipoproteins and glycoproteins), hormones, growth factors, and clotting factors (such. . .

molecule

in general, known methods can be used to join the macrocyclic chelants to backbone molecules. While for preferred macrocyclic chelants, such as DOTA, the conventional mixed anhydride and cyclic anhydride conjugation techniques are ineffective, it has been found that modifying the mixed anhydride procedure by reacting a. . .

For macrocycles with a pendant carboxylate, including but not limited to DOTA, TETA, TRITA (1.4,7,10-tetraazacyclotridecanetetraacetic acid) and NOTA, one of the carboxylates can form an entity which can react with a primary amine group of. . .

linked to the

backbone polymer through a non-coordinating primary amine group. Macrocyclic chelants having a non-coordinating primary amine group include primary amine side-chain-derivatized DOTA macrocycles, primary amine-derivatized DO3A. and primary amine-derivatized hexaaza and octaaza. macrocycles and macrobicycles (the HAMsr sepulchrates and sarcophagines) as well as the. . .

Metal incorporation into DOTA derived and related

macrocylic chelant moieties will normally be a slow process, as described in the references cited below, Specific examples of the. . .

Ned,, 3:808 (1986) and WO-A-87/06229 describe incorporation of Gd(III) into DOTA, A method of preparing Bi and Pb complexes of DOTA is described by Kumar et alf J. Chem, Soc, Chem, Commun., 3:145 (1989) o The above references are incorporated herein by reference in their. . .

reduction of 99mTc

with Sn in the presence of a weakly coordinating ligand such as glucoheptonate prior to complexation with chelants such as DOTA, These methods are well known in the radiopharmaceutical art. OCu utilizes tetraamine chela]tes such as tet A or tet B (see Bhardaredj. . .

for example, physiologically biocompatible buffers (as for example, tromethamine hydrochloride), additions (e.g., 0,01 to 10 mole percent) of chelants (such as, for example, DTPA, DTPA

bisamide or non-complexed magnifier polychelant) or calcium chelate complexes (as for example calcium DTPA, CaNaDTPA-bisamide, calcium-magn-ifier polychelant or CaNa salts of magnifier polychelants),, or, optionally, additions (e.g., I to 50 mole percent) of calcium or sodium salts (for. . .

EXAMPLE I

Preparation of DOTA Carboxycarbonic Anhydride DOTA(0*808 g-I 2,0 mmol) was suspended in 5.0 ml of anhydrous acetonitrile, Tetramethylguanidine (1e00 mli, 8.0 mmol) was added and the mixture stirred under an atmosphere of nitrogen for about 5 minutes at ambient temperature until the DOTA was dissolved, The resulting solution was cooled to -250C under an atmosphere of nitrogen and stirred while adding 0,260 ml (2,0 mmol).

The resulting slurry was stirred for I hour at -25 C4 EXAMPLE 2. Preparation of DOTA-N(2-aminoethV1) amide To the cold slurry from Example 1 was added a solution of mono-BOC-ethylenediamine (0,320g, 2mmol) in 2 ml acetonitrile and the mixture stirred. . afforded 0.35g of a crystalline glass. IH NMR demonstrated the expected product, as well as some residual acetate (from chromatography), EXAMPLE 3 Preparation of DOTA-N(4-aminoDhenethvl)amide To the cold slurry from Example 1 is added a solution of 4-nitrophenethylamine (0,332g, 2mmol) in 4.0 ml acetonitrile, The mixture is stirred. . . and pH adjusted to 1015 with NaOH to form a mixture which is extracted with ethyl acetate to remove unreacted amine, The product, DOTA-N-(41-nitrophenethyl)amide, is isolated by ion . exchange chromatography on DOWEX AGI-XS resin.

ceases to drop, The product is isolated by filtering off catalyst and evaporating the filtrate to dryness, EXAMPLE 4
Activation of Amino Group of DOTA-N(2-aminoethyl)amide